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Water Year 1972

Part 2. Water Quality Records

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Water resources data for the 1972 water year for Oklahoma consist of records of discharge and water quality of streams, and water quality of lakes and reservoirs. This report contains water quality for 52 gaging stations. Additional water data were collected at various sites, not part of the systematic data collection program, and are published as miscellaneous analyses. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating local, State, and Federal agencies in Oklahoma.

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for
Oklahoma
Water Year 1972

Part 2. Water Quality Records

MARCH 3, 1849

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U.S. GEOLOGICAL SURVEY WATER-DATA REPORT OK-72-2

Prepared in cooperation with the State of Oklahoma
and with other agencies

Prepared in cooperation with

Oklahoma Water Resources Board
Oklahoma State Department of Health,
Environmental Health Service
Bureau of Reclamation, U.S. Department
of the Interior

Water resources records, 1972, for Oklahoma are in the following reports of the U.S. Geological Survey:

1. Water Resources Data for Oklahoma
   Part 1. Surface Water Records
2. Water Resources Data for Oklahoma
   Part 2. Water Quality Records

Copies of this report may be obtained from
District Chief, Water Resources Division
U.S. Geological Survey
Rm. 621 Old Post Office Building
201 Northwest 3rd Street
Oklahoma City, Oklahoma 73102

1974

CONTENTS

Page

List of water-quality stations, in downstream order, for which records are published IV
Introduction 1
Cooperation 2
Definition of terms 2
Special networks and programs 10
Downstream order and station numbers 11
Collection and examination of data 12
  Solutes 14
  Temperature 15
  Sediment 15
Water-supply papers 16
Selected references 17
Water-quality records 20
Index 203

ILLUSTRATIONS

Figure 1. Map showing locations of water-quality stations in Oklahoma VI

TABLES

Table

1. Factors for conversion of chemical constituents in milligrams or micrograms per litre to milliequivalents per litre 5
2. Factors for conversion of sediment concentration in milligrams per litre to parts per million 5
3. Degrees Celsius (°C) and to degrees Fahrenheit (°F) 14
4. Water-supply paper numbers, water years 1941-1971 16
5. Factors for converting English units to International System (SI) units 19

WATER-QUALITY STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

(Letters after station name designate type of data: (c) chemical, (t) water temperature, (s) sediment)

Page

LOWER MISSISSIPPI RIVER BASIN

Mississippi River:

ARKANSAS RIVER BASIN

- Arkansas River at Arkansas City, Kans. (cts) 20
  - Salt Fork Arkansas River near Jet (ct) 28
  - Salt Fork Arkansas River at Tonkawa (ct) 34
- Arkansas River at Ralston (ct) 40
- Keystone Lake near Cleveland (c) 46
  - Cimarron River near Buffalo (ct) 48
  - Cimarron River near Waynoka (ct) 54
  - Cimarron River at Perkins (ct) 60
- Keystone Lake near Sand Springs (c) 66
- Arkansas River at Sand Springs Bridge, near Tulsa (ct) 68
  - Verdigris River near Oologah (c) 74
    - Caney River near Ramona (ct) 76
    - Bird Creek near Sperry (ct) 80
    - Bird Creek near Catoosa (c) 84
  - Verdigris River near Inola (c) 84
  - Newt Graham Lock and Dam near Inola (ct) 86
  - Neosho River near Commerce (c) 90
    - Pryor Creek below Sulfur Creek, near Pryor (c) 92
  - Neosho River below Fort Gibson Reservoir, near Fort Gibson (c) 93
  - Illinois River near Watts (c) 94
  - Illinois River near Gore (c) 96
  - Canadian River near Bridgeport (ct) 98
  - Little River
  - Lake Thunderbird near Norman (c) 101
  - Little River near Sasakwa (ct) 102
- Canadian River at Calvin (ct) 106
  - Beaver River near Guymon (c) 111
  - Beaver River at Beaver (ct) 112
  - Canton Lake near Canton (c) 114
  - North Canadian River near Harrah (ct) 116
  - North Canadian River near Wetumka (ct) 120
    - Deep Fork near Arcadia (ct) 124
    - Deep Fork near Beggs (ct) 128

Page

LOWER MISSISSIPPI RIVER BASIN--Continued
Mississippi River--Continued
ARKANSAS RIVER BASIN--Continued
Canadian River--Continued

Canadian River near Whitefield (ct)................. 132
Robert S. Kerr Lock and Dam near Sallisaw (c)......... 138

RED RIVER BASIN
Red River:

North Fork Red River near Carter (ct)............... 140
Elm Fork of North Fork Red River near Carl (ct)... 146
Elm Fork of North Fork Red River near Mangum (ct). 152
Elk Creek near Hobart (ct)......................... 158
North Fork Red River near Headrick (ct)............. 162

Cache Creek:

East Cache Creek near Walters (ct)................ 168

West Cache Creek:

Blue Beaver Creek near Cache (c)................ 172
Washita River near Cheyenne (c)..................... 173
Washita River near Hammon (ct)...................... 174
Foss Reservoir near Foss (c)........................ 179
Washita River near Foss (ct)........................ 180
Washita River at Carnegie (ct)...................... 184
Washita River near Durwood (ct)..................... 188

Muddy Boggy Creek:

Caney Boggy Creek near Ashland (c)................ 193
Clear Boggy Creek near Caney (c)................. 195
Kiamichi River near Big Cedar (cs).................. 196
Red River near Valliant (c)........................... 198
Red River near Millerton (c).......................... 199
Little River below Lukfata Creek, near Idabel (c)... 200
Analyses of samples collected at water-quality partial-record stations (c).................... 202

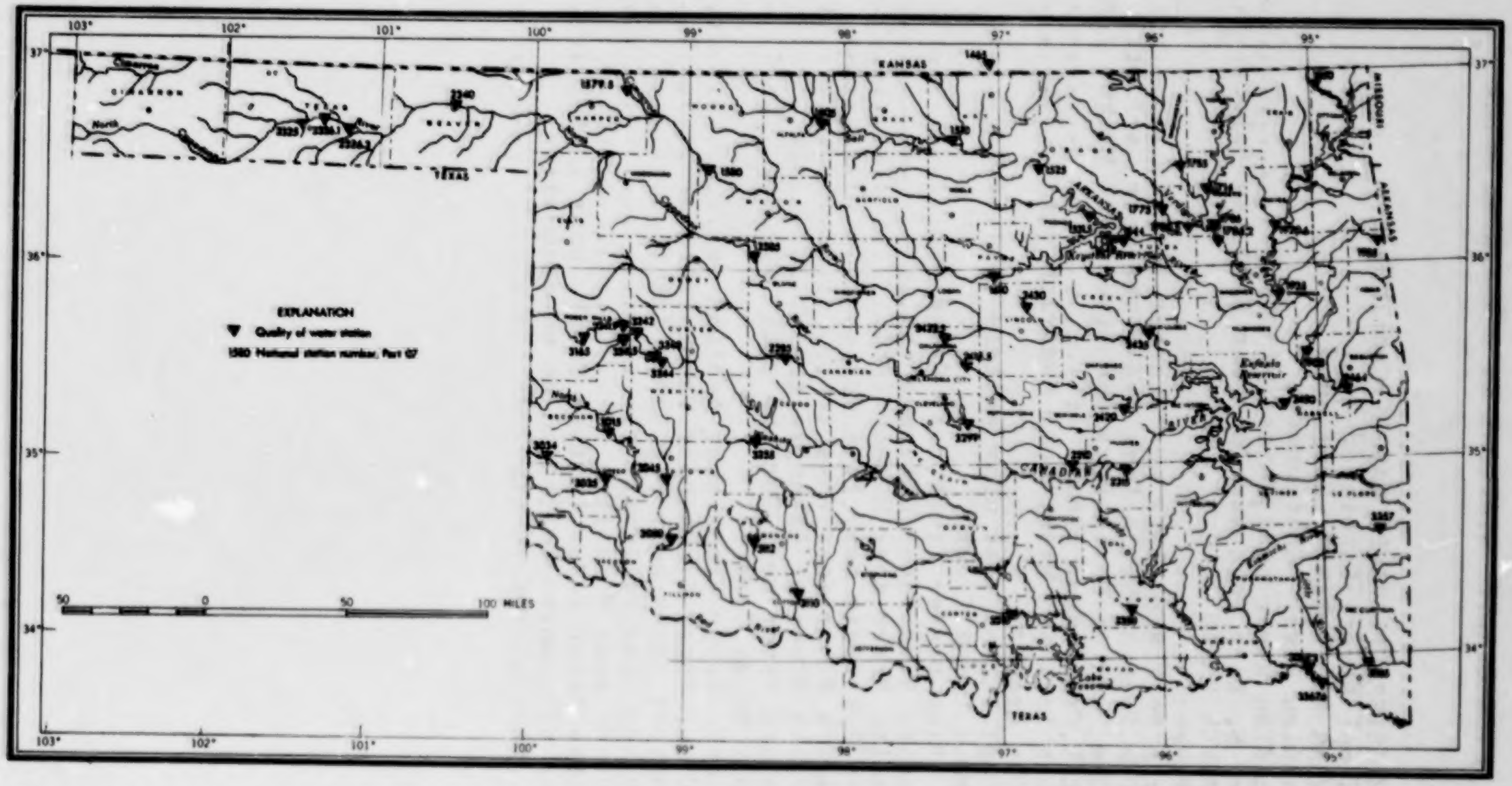
KANSAS
MISSOURI
ARKANSAS
TEXAS
TEXAS
Eufaula Reservoir
EXPLANATION
▼ Quality of water station
1580 National station number, Part 07
50
0
50
100 MILES
103°
102°
101°
100°
99°
98°
97°
96°
95°
37°
36°
35°
34°

Figure 1. Map of Oklahoma showing locations of water-quality staions, 1972 water year.

WATER RESOURCES DATA FOR OKLAHOMA, 1972

Part 2. Water Quality Records

by J. K. Kurklin

INTRODUCTION

Water-resources data for the 1972 water year for Oklahoma include records of data for the chemical and physical characteristics of surface water. Data on the quality of surface water (chemical, temperature, and sediment) were collected from designated sampling sites at regular intervals such as once daily, weekly, monthly or less frequently, and at some sites data were recorded on punched paper tape at 60-minute intervals. Records are given for 55 sampling stations of which 52 are continuous record stations and 3 are partial-record stations. A few pertinent stations (not included above) in bordering States are also included. The records were collected by the Water Resources Division of the U.S. Geological Survey under the direction of J. H. Irwin, district chief. Oklahoma district personnel who contributed to the collection, laboratory analysis and collation of data included T. E. Waldrep, D. M. Ferree, M. J. Webster, G. L. Keller, R. L. Factory, E. O. Stockton, G. L. Lake, and W. P. Wells. These data represent that portion of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Oklahoma.

The Geological Survey has published records of chemical quality, water temperatures, and sediment since 1941 in an annual series of water-supply papers entitled, "Quality of Surface Waters of the United States". Beginning with the 1964 water year, water-quality records have been released by the Geological Survey in annual reports on a State-boundary basis. These reports are for limited distribution and are designed primarily for rapid release of data shortly after the end of the water year. These records will be published later in Geological Survey water-supply papers.

COOPERATION

This report was prepared by the U.S. Geological Survey under cooperative agreement with the following organizations:

Oklahoma Water Resources Board, Milton Creig, Chairman, succeeded by Don Arch King, Forrest Nelson, executive director.

Oklahoma State Department of Health, Environmental Health Services, Loyd F. Pummill, chief.

Agencies furnishing assistance in the form of funds were:

Corps of Engineers, U.S. Army.
Bureau of Reclamation, U.S. Department of the Interior.
Environmental Protection Agency.

DEFINITION OF TERMS

Terms related to water-quality and hydrologic data, as used in this report are defined as below. See also table for converting English units to International System of units (SI) on page 19.

Acre-foot (ac-ft, AC-FT) is a quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons.

Bed material is the shifting portion of fragmented alluvial material of which the streambed is composed.

Biochemical oxygen demand (BOD) is a measure of the amount of oxygen required by aerobic bacteria while stabilizing decomposable organic matter. Thus, the determination of BOD provides an indication of the quantity of organic material in the water at the sampling point. Because complete stabilization may require a period too long for practical purposes, the 5-day BOD test has been accepted as standard. The BOD data presented in this report are based on the standard 5-day BOD test.

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, or about 646,000 gallons, and represents a runoff of approximately 0.0372 inches from 1 square mile.

Chemical oxygen demand (COD) indicates the quantity of oxidizable compounds in water and varies with water composition(s), temperature, period of contact, and other factors.

Coliform organisms are a group of bacteria used as an indicator of the sanitary quality of the water. The number of coliform colonies per 100 millilitres is determined by the immediate membrane filter method.

Color of water as considered in this report is that due only to substances in solution. It may be of natural mineral, animal, or vegetable origin. Color may be caused by metallic substances, humus material, peat, algae, weeds, or protozoa. Industrial wastes may also color water.

Continuous-record station is a particular site where chemical quality, water temperature and/or sediment data are collected once daily, twice daily, more than twice daily, weekly, or monthly on a regularly scheduled basis.

Cubic foot per second (cfs, CFS) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 7.48 gallons per second or 448.8 gallons per minute.

Discharge is the volume of water (or more broadly, total fluids), that passes a given point within a given period of time.

Mean discharge is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved oxygen (DO) in surface water is necessary for the support of aquatic life and the aerobic decomposition of organic material, and thus is one of the most important indicators of the biological, chemical, and sanitary quality of the water.

Drainage area of a stream at a specified location is that area, measured in horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the river above the specified point.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system which consists of a surface stream or body of impounded surface water together with all tributary surface stream and bodies of impounded surface water.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of gage height or discharge are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is computed.

Hardness of water is a physical-chemical characteristic attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

Micrograms per litre (ug/l, UG/L) expresses the concentration of chemical constituents in solution as weight (micrograms) of solute per unit volume (litre) of water. One thousand micrograms per litre is equivalent to one milligram per litre.

Milligrams per litre (mg/l, MG/L) expresses the concentration of chemical constituents in solution. Milligrams per litre is the weight of solute per unit volume of water. Milligrams or micrograms per litre may be converted to milliequivalents (one thousandth of a gram-equivalent weight of a constituent) per litre by multiplying the factors in table 1, page 5. Concentration of suspended sediment also is expressed in mg/l, and is based on the weight of sediment per litre of water-sediment mixture. Sediment concentrations may be converted to parts per million by using the factors in table 2, page 5.

Partial-record station is a particular site where limited streamflow or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimetres (mm), of suspended sediment or bed material determined by sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling) (Guy, 1969).

Table 1.--Factors for conversion of chemical constituents in milligrams or micrograms per litre to milliequivalents per litre

Ion	Multiply by	Ion	Multiply by
Aluminum (Al^{+3})*...	0.11119	Iodide (I^{-1}).....	0.00788
Ammonia as NH_4^{+1}...	.05544	Iron (Fe^{+3})*.....	.05372
Barium (Ba^{+2})......	.01456	Lead (Pb^{+2})*.....	.00965
Bicarbonate (HCO_3^{-1})	.01639	Lithium (Li^{+1})*..	.14411
Bromide (Br^{-1}).....	.01251	Magnesium (Mg^{+2}).	.08226
Calcium (Ca^{+2}).....	.04990	Manganese (Mn^{+2})*.	.03640
Carbonate (CO_3^{-2})..	.03333	Nickel (Ni^{+2})*...	.03406
Chloride (Cl^{-1})....	.02821	Nitrate (NO_3^{-1})..	.01613
Chromium (Cr^{+6})*...	.11539	Nitrite (NO_2^{-1})..	.02174
Cobalt (Co^{+2})*.....	.03394	Phosphate (PO_4^{-3})	.03159
Copper (Cu^{+2})*.....	.03148	Potassium (K^{+1})..	.02557
Cyanide (CN^{-1}).....	.03844	Sodium (Na^{+1})....	.04350
Fluoride (F^{-1}).....	.05264	Strontium (Sr^{+2})*	.02283
Hydrogen (H^{+1}).....	.99209	Sulfate (SO_4^{-2})..	.02082
Hydroxide (OH^{-1})...	.05880	Zinc (Zn^{+2})*.....	.03060

*Constituent reported in micrograms per litre; multiply by factor and divide results by 1,000.

Table 2.--Factors for conversion of sediment concentration in milligrams per litre to parts per million*
(All values calculated to three significant figures)

Range of concentration in 1000 mg/l	Divide by	Range of concentration in 1000 mg/l	Divide by	Range of concentration in 1000 mg/l	Divide by	Range of concentration in 1000 mg/l	Divide by
0 - 8	1.00	201-217	1.13	411-424	1.26	619-634	1.39
8.05- 24	1.01	218-232	1.14	427-440	1.27	636-650	1.40
24.2 - 40	1.02	234-248	1.15	443-457	1.28	652-666	1.41
40.5 - 56	1.03	250-264	1.16	460-473	1.29	668-682	1.42
56.5 - 72	1.04	266-280	1.17	476-489	1.30	684-698	1.43
72.5 - 88	1.05	282-297	1.18	492-506	1.31	700-715	1.44
88.5 -104	1.06	299-313	1.19	508-522	1.32	717-730	1.45
105 -120	1.07	315-329	1.20	524-538	1.33	732-747	1.46
121 -136	1.08	331-345	1.21	540-554	1.34	749-762	1.47
137 -152	1.09	347-361	1.22	556-570	1.35	765-780	1.48
153 -169	1.10	363-378	1.23	572-585	1.36	782-796	1.49
170 -185	1.11	380-393	1.24	587-602	1.37	798-810	1.50
186 -200	1.12	395-409	1.25	604-617	1.38		

*Based on water density of 1.000 g/ml and a specific gravity of sediment of 2.65.

Particle-size classification, used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay..........	0.00024 - 0.004	Sedimentation.
Silt..........	.004 - .062	Sedimentation.
Sand..........	.062 - 2.0	Sedimentation or sieve.
Gravel........	2.0 - 64.0	Sieve.

The particle size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis (Guy, 1969).

Pesticides include insecticides and herbicides.

Insecticides are substances or a mixture of substances intended to prevent, destroy, or repel insects.

Technical names for insecticides analyzed are:

Aldrin should contain not less than 95 percent of 1, 2, 3, 4, 10, 10-hexachloro-1, 4, 4a,-5, 8, 8a-hexahydro-1, 4-endoexo-5,8-dimethanonapthalene.

Chlordane 1, 2, 4, 5, 6, 7, 8, 8-octachloro-3a, 4, 7, 7a-tetrahydro-4, 7-methanoindane.

DDD 1, 1-dichloro-2, 2-bis (p-chlorophenyl) ethane.

DDE 1, 1-dichloro-2, 2-bis (p-chlorophenyl) ethylene.

DDT 1, 1, 1-trichloro-2, 2-bis (p-chlorophenyl) ethane.

Diazinon O, O-diethyl O- (2-isopropyl-4-methyl-6-pyrimidinyl) phosphorothioate.

Dieldrin should contain not less than 85 percent of 1, 2, 3, 4, 10, 10-hexachloro-6, 7-epoxy-1, 4, 4a, 5, 6, 7, 8, 8a-octahydro-1, 4-endo, exo-5,8-dimethanonaphthalene.

Endrin 1, 2, 3, 4, 10, 10-hexachloro-6, 7-epoxy-1, 4, 4a, 5, 6, 7, 8, 8a-octahydro-1, 4-endo-endo-5, 8-dimethanonaphthalene.

Heptachlor 1, 4, 5, 6, 7, 8, 8-heptachloro-3a, 4, 7, 7a-tetrahydro-4, 7-methanoindene.

Heptachlor epoxide 1, 4, 5, 6, 7, 8, 8-heptachloro-2, 3-epoxy-3a, 4, 7, 7a-tetrahydro-4, 7-methanoindan.

Lindane 1, 2, 3, 4, 5, 6-hexachlorocyclohexane, 99 percent or more of gamma isomer.

Methyl parathion O, O-dimethyl O-para-nitrophenyl phosphorothioate.

Malathion S- 1,2-bis (ethoxycarbonyl) ethyl O, O-dimethyl phosphorodithioate.

Parathion O, O-diethyl O-para-nitrophenyl phosphorothioate.

Herbicides are substances or a mixture of substances intended to control or destroy any vegetation.

Technical names for herbicides analyzed are:

2, 4-D 2, 4-dichlorophenoxyacetic acid.

2, 4, 5-T 2, 4, 5-trichlorophenoxyacetic acid.

Silvex 2-(2, 4, 5-trichlorophenoxy-) propionic acid.

Plankton is the floating (or weakly swimming) animal or plant life in a body of water consisting chiefly of minute plants (as diatoms and blue-green algae) and of minute animals (as protozoan, entomostracans, and various larvae).

Sediment is solid material that originates mostly from disintegrated rocks and is transformed by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment discharge is the rate at which sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight, or by volume, that is discharged in a given time. It is computed by multiplying discharge times mg/l times 0.0027.

Total sediment discharge or total sediment load is the total quantity of sediment, as measured by dry weight or volume, that is discharged during a given time (Colby and Hembree, 1955). It is the sum of the suspended-sediment discharge and the bedload discharge.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per litre of water-sediment mixture (mg/l).

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Sodium-adsorption-ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions with soil and is an index of sodium or alkali hazard to the soil. This ratio is used to evaluate the suitability of water used for irrigating farmland.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current and is expressed in micromhos per centimeter at 25°C. Because the specific conductance is related to the number and specific chemical types of ions in solution, it can be used for approximating the dissolved-solids content in the water. Commonly, the amount of dissolved solids (in milligrams per litre) is about 65 percent of the specific conductance (in micromhos). This relation is not constant from stream to stream or from well to well, and it may even vary in the same source with changes in the composition of the water.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff". Streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Thermograph is a thermometer that continuously and automatically records, on a chart, the water temperature of a stream. "Temperature recorder" is the term used to indicate the location of the thermograph or a digital mechanism that automatically records water temperature on paper tape.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the water year.

Tons per acre-foot indicates the dry weight of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per litre by 0.00136.

Tons per day is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour day.

Turbidity of water is the reduction of transparency due to the presence of suspended particulate matter. Such material may consist of clay or silt, finely divided organic matter, plankton, or other microscopic organisms which cause light to be transmitted in straight lines through the matter.

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

SPECIAL NETWORKS AND PROGRAMS

Some of the stations for which data are published in this report are included in special networks and programs. These stations are identified by their title, set in parentheses, under the station name.

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from man-made changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

Irrigation network stations are water-quality stations located at or near certain streamflow gaging stations west of the main stem of the Mississippi River. Data collected at these stations are used to evaluate the chemical quality of surface waters used for irrigation and the changes resulting from the drainage of irrigated lands. Prior to water year 1966, the data for these stations were published in the annual water-supply paper series, "Quality of Surface Water for Irrigation, Western States".

Pesticide program is a network of regularly sampled water-quality stations where additional monthly samples are collected to determine the concentration and distribution of pesticides in streams whose waters are used for irrigation or in streams in areas where potential contamination could result from the application of the commonly used insecticides and herbicides.

Pesticides are chemical compounds used to control the growth of undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Since the first application of DDT as an insecticide in the early 1930's, there have been almost 60,000 pesticide formulations registered, each containing at least one of the approximately 800 different basic pesticide compounds (Goerlitz and Brown, 1972 p. 24). The United States annually produces about 1 billion pounds of these compounds. Although efforts are being made to substitute many of the chlorinated hydrocarbon pesticides with more specific, fast-acting, and easily degradable compounds, chlorinated hydrocarbon pesticides are still commonly used in many areas of the country.

Radiochemical program is a network of regularly sampled water-quality stations where additional samples are collected twice a year (at high and low flow) to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Radioisotopes are isotope forms of an element that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight, but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus. For example: Oridinary chlorine is a mixture of isotopes having atomic weights 35 and 37, with the natural mixture having atomic weight about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron (Rose, 1966). There are 275 isotopes of the 81 stable elements in addition to over 800 radioactive isotopes.

Radioisotopes that are determined in this program are those of uranium in micrograms per litre, radium as radium-226 in picocuries per litre, gross beta radiation as strontium/yttrium-90 in picocuries per litre, and gross alpha radiation as micrograms of uranium equivalent per litre.

A picocurie (PC/l, pCi/l) is one millionth of the amount of radioactivity represented by a microcurie, which is the quantity of radiation represented by one millionth of a gram of radium-226. A picocurie of radium results in 2.22 disintegration per minute.

DOWNSTREAM ORDER AND STATION NUMBERS

Stations are listed in downstream direction along the main stream, and stations on tributaries are listed between stations on the main stream in the order in which those tributaries enter the main stream. Stations on tributaries entering above all mainstream stations are listed before the first mainstream station. Stations on tributaries to tributaries are listed in a similar manner. In the list of water-quality stations in the front of this report the rank of tributaries is indicated by indention, each indention representing one rank.

As an added means of identification, each water-quality station, gaging station, and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record and continuous-record stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station. Gaps are left in the numbers to allow for new stations that may be established; hence the numbers are not consecutive. The complete 8-digit number for each station, such as 07152500, which appears just to the left of the station name includes the 2-digit part number "07" plus the 6-digit downstream order number "152500". In this report, the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines. Records in this report are in Part 7 (Lower Mississippi River basin). All records for a drainage basin encompassing more than one State could be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

COLLECTION AND EXAMINATION OF DATA

Water samples for analyses usually are collected at or near gaging stations. The discharge records at these stations are used in conjunction with the computations of the chemical constituents and sediment loads. Discharge records for streams in Oklahoma have been released in the report, "Water Resources Data for Oklahoma, 1972, Part 1. Surface Water Records."

The data in this report include a description of the sampling station and tabulations of the samples analyzed. The description of the sampling station gives the location, drainage area, periods of record for the various water-quality data, extremes of the pertinent data, and general remarks, in a format similar to that used for streamflow gaging stations.

Water-quality information is presented for chemical quality, biological, microbiological, water temperatures, and fluvial sediment. Chemical quality includes concentrations of individual dissolved constituents and certain properties or characteristics such as hardness, sodium adsorption ratic, specific conductance, and pH. The biological information includes qualitative and quantitative analyses of plankton, bottom organisms, and particulate inorganic and amorphous matter present. Microbiological information includes quantitative identification of certain bacteriological indicator organisms. Water-temperature data represent once-daily observations except for stations where a continuous temperature recorder furnishes information from which daily minimums and maximums are obtained. Fluvial-sediment information is given for suspended-sediment discharges and concentrations and for particle-size distribution of suspended sediment and bed material.

Prior to the 1968 water year, data for chemical constituents and concentrations of suspended sediment were reported in parts per million (ppm) and water temperatures were reported in degrees Fahrenheit (°F). In October 1967, the U.S. Geological Survey began to use the metric system; data for chemical constituents and concentrations of suspended sediment are now reported in milligrams per litre (mg/l) and water temperatures are given in degrees Celsius (centigrade, °C). In waters with a density of 1.000 g/ml (grams per millilitre), parts per million and milligrams per litre can be considered equal. In waters with a density greater than 1.000 g/ml, values in parts per million should be multiplied by the density to convert to milligrams per litre. Temperature reported in degrees Celsius may be converted to degrees Fahrenheit by using the table on page 14.

In October 1968, the Geological Survey began reporting many of the chemical constituents as well as the minor elements in micrograms per litre instead of milligrams per litre. (See "Definitions of Terms", p. 5 and table for converting English units to SI units, p. 19.)

Table 3.--Degrees Celsius (°C)* to degrees Fahrenheit (°F)*
(Temperature reported to nearest 0.5°C)

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0.0	32	10.0	50	20.0	68	30.0	86	40.0	104
.5	33	10.5	51	20.5	69	30.5	87	40.5	105
1.0	34	11.0	52	21.0	70	31.0	88	41.0	106
1.5	35	11.5	53	21.5	71	31.5	89	41.5	107
2.0	36	12.0	54	22.0	72	32.0	90	42.0	108
2.5	36	12.5	54	22.5	72	32.5	90	42.5	108
3.0	37	13.0	55	23.0	73	33.0	91	43.0	109
3.5	38	13.5	56	23.5	74	33.5	92	43.5	110
4.0	39	14.0	57	24.0	75	34.0	93	44.0	111
4.5	40	14.5	58	24.5	76	34.5	94	44.5	112
5.0	41	15.0	59	25.0	77	35.0	95	45.0	113
5.5	42	15.5	60	25.5	78	35.5	96	45.5	114
6.0	43	16.0	61	26.0	79	36.0	97	46.0	115
6.5	44	16.5	62	26.5	80	36.5	98	46.5	116
7.0	45	17.0	63	27.0	81	37.0	99	47.0	117
7.5	45	17.5	63	27.5	81	37.5	99	47.5	117
8.0	46	18.0	64	28.0	82	38.0	100	48.0	118
8.5	47	18.5	65	28.5	83	38.5	101	48.5	119
9.0	48	19.0	66	29.0	84	39.0	102	49.0	120
9.5	49	19.5	67	29.5	85	39.5	103	49.5	121

*C = 5/9 (°F - 32) or °F = 9/5 (°C) + 32.

Solutes

The methods of collecting and analyzing water samples for determining the kinds and concentrations of solutes are described by Brown, Skougstad, and Fishman (1970). One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge depending on the source of material and the turbulence and the mixing of the stream. Some must be sampled at several verticals across the channel to determine accurately the solute load.

The daily chemical quality data in this report generally represent equal-volume composites for 2- to 15-day periods; the composite periods are selected on the basis of specific conductance of the daily samples and fluctuation of water discharge.

For chemical-quality stations equipped with noncontinuous-digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the U.S. Geological Survey, Oklahoma District Office at the address given on the back of the title page of this report.

Temperature

Water temperatures are measured at most of the water-quality stations. For daily stations, the water temperatures are taken at about the same time each day when the sample is collected. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where continuously recording thermographs are present, the records consist of maximum and minimum temperatures for each day and the monthly averages.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross-section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the sub-divided day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the sub-divided day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

WATER-SUPPLY PAPERS

The annual series of water-supply papers that give information on quality of surface waters in the Lower Mississippi basin, Part 7, Oklahoma are shown in table 4.

Table 4.--Water-supply paper numbers, water years 1941-71.

Year	WSP	Year	WSP	Year	WSP
1941	942	1951	1199	1961	1884
1942	950	1952	1252	1962	1944
1943	970	1953	1292	1963	1950
1944	1022	1954	1352	1964	1957
1945	1030	1955	1402	1965	1964
1946	1050	1956	1452	1966	1994
1947	1102	1957	1522	1967	2014
1948	1133	1958	1573	1968	2096
1949	1163	1959	1644	1969	A2146
1950	1188	1960	1744	1970	A2156
				1971	A2166

A In press.

SELECTED REFERENCES

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___, 1969, Laboratory theory and methods for sediment analysis: U.S. Geol. Survey Techniques of Water-Resources Inv., book 5, chap. C1, 58 p.

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Hem, J. D., 1970, Study and interpretation of the chemical characteristics of natural water, 2nd edition: U.S. Geological Survey Water-Supply Paper 1473, 363 p.

Langbein, W. B., and Iseri, K. T., 1960, General introduction and hydrologic definitions: U.S. Geol. Survey Water-Supply Paper 1541-A, 29 p.

Porterfield, George, 1972, Computations of fluvial-sediment discharge: U.S. Geol. Survey Techniques of Water-Resources Inv., book 5, chap. C3, 66 p.

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Rose, Arthur and Elizabeth, 1966, The condensed chemical dictionary: Reinhold Pub. Corp., New York, 7th ed., p. 257.

U.S. Inter-Agency Committee on Water Resources, Subcommittee on Sedimentation, A study of methods used in measurement and analysis of sediment loads in streams. Published by the St. Anthony Falls Hydraulic Laboratory, Minneapolis, Minn.

____ 1941, Methods of analyzing sediment samples: Rept. 4.

____ 1953, Accuracy of sediment size analyses made by the bottom-withdrawal-tube method: Rept. 10.

____ 1957, The development and calibration of visual accumulation tube: Rept. 11.

____ 1957, Some fundamentals of particle size analysis: Rept. 12.

____ 1959, Federal Inter-agency sedimentation instruments and reports: Rept. AA.

____ 1961, The single stage sampler for suspended sediment: Rept. 13.

____ 1963, Determinations of fluvial sediment discharge: Rept. 14.

Table 5.--Factors for converting English units to International System (SI) units.

The following factors may be used to convert the English units published herein to the International System of Units (SI). Subsequent reports will contain both the English and SI unit equivalents in the station manuscript descriptions until such time that all data will be published in SI units.

Multiply English units	By	To obtain SI units
	Length	
inches (in)	25.4	millimetres (mm)
	.0254	metres (m)
feet (ft)	.3048	metres (m)
yards (yd)	.9144	metres (m)
rods	5.0292	metres (m)
miles (mi)	1.609	kilometres (km)
	Area	
acres	4047	square metres (m^2)
	.4047	*hectares (ha)
	.4047	square hectometre (hm^2)
	.004047	square kilometres (km^2)
square miles (mi^2)	2.590	square kilometres (km^2)
	Volume	
gallons (gal)	3.785	**litres (l)
	3.785	cubic decimetres (dm^3)
	3.785×10^{-3}	cubic metres (m^3)
million gallons (10^6 gal)	3785	cubic metres (m^3)
	3.785×10^{-3}	cubic hectometres (hm^3)
cubic feet (ft^3)	28.32	cubic decimetres (dm^3)
	.02832	cubic metres (m^3)
cfs-day (ft^3/s-day)	2447	cubic metres (m^3)
	2.447×10^{-3}	cubic hectometres (hm^3)
acre-feet (acre-ft)	1233	cubic metres (m^3)
	1.233×10^{-3}	cubic hectometres (hm^3)
	1.233×10^{-6}	cubic kilometres (km^3)
	Flow	
cubic feet per second (ft^3/s)	28.32	litres per second (l/s)
	28.32	cubic decimetres per second (dm^3/s)
	.02832	cubic metres per second (m^3/s)
gallons per minute (gpm)	.06309	litres per second (l/s)
	.06309	cubic decimetres per second (dm^3/s)
	6.309×10^{-5}	cubic metres per second (m^3/s)
million gallons per day (mgd)	43.81	cubic decimetres per second (dm^3/s)
	.04381	cubic metres per second (m^3/s)
	Mass	
ton (short)	.9072	tonne (t)

*The unit hectare is approved for use with the International System (SI), for a limited time. See NBS Special Bulletin 330, p. 15, 1972 edition.

**The unit liter is accepted for use with the International System (SI). See NBS Special Bulletin 330, p. 13, 1972 edition.

PART 7. LOWER MISSISSIPPI RIVER BASIN

ARKANSAS RIVER BASIN

07146500 ARKANSAS RIVER AT ARKANSAS CITY, KANS.
(Irrigation network station)

LOCATION.--Lat 37°03'23", long 97°03'32", in NE1/4NE1/4NE1/4 sec.35, T.34 S., R.3 E., Cowley County, at bridge on Chestnut Street, 0.4 mi (0.6 km) upstream from St. Louis - San Francisco Railway Company bridge, 0.5 mi (0.8 km) upstream from gage on U.S. Highway 166 bridge, 0.5 mi (0.8 km) west of Arkansas City, 5.9 mi (9.5 km) upstream from Walnut River, and at mile 701.9 (1,129.9 km).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SODIUM (NA) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS_ SOLVED NITRATE (NO3) (MG/L)	PHOS- PHATE (PO4) (MG/L)
OCT.								
05...	880	190	198	0	90	280	4.0	1.8
15...	810	190	206	0	92	280	4.9	1.7
25...	1100	220	198	0	100	320	8.1	2.0
NOV.								
05...	5080	41	86	0	27	59	6.8	.92
15...	812	220	194	0	140	300	7.0	1.7
25...	3040	79	130	0	59	110	7.0	.89
DEC.								
05...	1760	220	212	0	170	300	7.6	1.4
15...	2340	160	144	0	120	220	7.9	1.4
25...	1180	270	240	0	210	410	7.8	2.3
JAN.								
05...	550	390	268	0	280	560	8.2	1.2
15...	500	380	278	0	300	550	5.7	1.5
25...	749	300	240	0	260	390	17	1.5
FEB.								
05...	700	360	268	0	280	490	14	2.4
15...	776	310	244	0	280	420	14	2.4
25...	594	340	252	0	300	450	12	2.4
MAR.								
05...	506	360	240	8	320	490	8.8	2.2
15...	562	330	230	0	300	450	8.3	2.7
25...	562	340	212	0	330	450	7.2	2.9
APR.								
05...	476	370	242	0	280	510	8.9	2.8
15...	476	360	230	0	240	500	8.2	3.2
25...	476	300	230	0	200	460	9.9	3.4
MAY								
01...	875	240	208	0	170	340	8.1	2.7
15...	1110	210	200	0	140	300	7.2	2.2
25...	530	350	224	0	220	540	5.8	6.8
JUNE								
05...	875	160	148	0	92	220	5.2	2.3
15...	634	300	224	0	180	420	.40	3.4
25...	722	220	182	0	130	300	8.3	3.1
JULY								
05...	785	180	176	0	120	250	6.4	2.7
15...	722	160	170	0	110	220	5.6	2.4
25...	618	240	208	0	140	350	7.4	2.7
AUG.								
05...	434	260	184	0	140	360	7.0	3.3
15...	257	330	200	0	170	480	5.7	2.7
25...	280	530	220	0	230	800	7.4	5.0
SEP.								
05...	1740	55	152	0	54	75	8.1	1.6
15...	1130	150	162	0	130	200	11	2.3
25...	562	280	210	0	240	390	9.2	3.7

WATER QUALITY RECORDS

PART 7. LOWER MISSISSIPPI RIVER BASIN

ARKANSAS RIVER BASIN

07146500 ARKANSAS RIVER AT ARKANSAS CITY, KANS.
(Irrigation network station)

DRAINAGE AREA.--43,713 sq mi (113,216.7 km²), of which 7,607 sq mi (19,702.1 km²), is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1951 to current year.
Water temperatures: October 1951 to current year.
Sediment record: September 1961 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.								
05...	764	1.04	1820	240	78	5.3	1380	7.7
15...	776	1.06	1700	240	71	5.3	1390	7.8
25...	844	1.15	2510	240	78	6.2	1510	8.0
NOV.								
05...	232	.32	3180	96	25	1.8	406	7.1
15...	884	1.20	1940	260	101	5.9	1560	7.9
25...	390	.53	3200	150	43	2.8	682	7.7
DEC.								
05...	940	1.28	4470	310	136	5.4	1600	8.3
15...	676	.92	4270	220	102	4.7	1190	7.9
25...	1210	1.65	3860	380	183	6.0	2060	8.1
JAN.								
05...	1580	2.15	2350	450	230	8.0	2630	8.3
15...	1630	2.22	2200	500	272	7.4	2690	7.9
25...	1250	1.70	2530	400	203	6.5	2070	7.9
FEB.								
05...	1460	1.99	2760	460	240	7.3	2430	7.6
15...	1300	1.77	2720	400	200	6.7	2160	7.6
25...	1450	1.97	2210	450	243	7.0	2350	7.9
MAR.								
05...	1520	2.07	2080	460	250	7.3	2450	8.5
15...	1430	1.94	2170	420	231	7.0	2300	7.9
25...	1450	1.97	2200	420	246	7.2	2300	7.6
APR.								
05...	1540	2.09	1980	440	241	7.7	2440	7.7
15...	1430	1.94	1840	390	201	7.9	2330	7.6
25...	1310	1.78	1680	380	191	6.7	2160	7.4
MAY								
01...	1050	1.43	2480	320	150	5.8	1720	7.2
15...	904	1.23	2710	270	110	5.6	1490	7.2
25...	1440	1.96	2060	420	240	7.4	2370	7.5
JUNE								
05...	658	.89	1560	190	69	5.1	1160	8.2
15...	1190	1.62	2040	310	130	7.4	2010	8.3
25...	886	1.20	1730	250	100	6.1	1490	7.8
JULY								
05...	772	1.05	1640	240	96	5.1	1320	7.6
15...	699	.95	1360	220	81	4.7	1200	7.5
25...	986	1.34	1650	300	130	6.0	1700	7.4
AUG.								
05...	980	1.33	1150	270	120	6.9	1710	7.5
15...	1270	1.73	881	320	160	8.0	2180	7.5
25...	1880	2.56	1420	440	260	11	3200	7.6
SEP.								
05...	340	.46	1600	170	45	1.8	588	7.2
15...	688	.94	2100	220	87	4.4	1140	6.7
25...	1160	1.58	1760	350	180	6.5	1930	7.2

07146500 ARKANSAS RIVER AT ARKANSAS CITY, KANS.--Continued
(Irrigation network station)

CHEMICAL ANALYSES OF ADDITIONAL SAMPLES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	DISSOLVED NITRITE (NO2) (MG/L)	DISSOLVED ORGANIC NITROGEN (N) (MG/L)
OCT. 28...	1300	220	200	0	120	300	1.2	5.4	.33	1.0	3.0
NOV. 16...	758	220	202	0	120	340	1.5	6.6	.03	.1	.10
DEC. 14...	1410	260	236	0	200	360	1.7	7.6	.03	.1	.56
JAN. 11...	1060	320	242	0	250	440	1.8	7.7	.01	.0	.30
FEB. 08...	650	320	258	0	270	490	1.5	6.8	.03	.1	.19
MAR. 21...	578	380	220	12	340	500	.00	.20	.00	.0	.78
APR. 12...	476	340	248	0	280	490	.10	.60	.03	.1	2.4
MAY 03...	2660	190	196	0	170	260	.70	3.1	.03	.1	7.2
JUNE 14...	427	330	190	14	230	470	.20	.80	.03	.1	1.7
JULY 06...	911	210	204	0	160	310	.20	.70	.00	.0	3.2
AUG. 16...	262	330	162	6	190	500	.14	.60	.01	.0	3.2
SEP. 28...	602	290	204	4	200	400	.86	3.8	.00	.0	.50

07146500 ARKANSAS RIVER AT ARKANSAS CITY, KANS.--Continued
(Irrigation network station)

CHEMICAL ANALYSES OF ADDITIONAL SAMPLES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)
OCT. 28...	.55	1.7	832	240	76	6.2	1470	8.0	14.0	60	6.2
NOV. 16...	.66	2.0	906	280	110	5.7	1610	8.2	16.0	20	1.6
DEC. 14...	.76	2.3	1090	350	156	6.0	1840	8.2	7.0	15	3.3
JAN. 11...	.78	2.4	1310	370	171	7.2	2190	8.1	4.0	22	3.0
FEB. 08...	.82	2.5	1420	450	238	6.6	2390	8.0	2.0	10	2.6
MAR. 21...	1.0	3.1	1490	430	230	8.0	2480	8.7	15.0	42	10
APR. 12...	.90	2.8	1490	420	217	7.2	2350	8.2	22.5	21	11
MAY 03...	1.5	4.5	884	300	139	4.8	1460	7.6	16.0	72	15
JUNE 14...	1.1	3.4	1260	360	181	7.6	2130	8.8	22.5	66	19
JULY 06...	1.1	3.4	872	310	143	5.2	1480	8.2	20.0	54	11
AUG. 16...	1.2	3.5	1260	310	170	8.2	2120	8.5	24.0	51	15
SEP. 28...	.29	.90	1200	330	160	6.9	2110	8.4	20.5	55	9.6

FIELD ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION
OCT. 28...	1440	8.0	14.0	9.0	90
NOV. 16...	1850	8.1	16.0	9.4	101
DEC. 14...	2000	7.8	7.0	10.2	89
JAN. 11...	2100	8.6	4.0	12.2	100
FEB. 08...	2250	8.2	2.0	13.2	102
MAR. 21...	2260	9.0	15.0	13.8	145
APR. 12...	2280	9.0	22.5	14.8	184
MAY 03...	1410	7.9	16.0	5.0	54
JUNE 14...	2000	9.1	22.5	10.8	135
JULY 06...	1600	8.8	20.0	8.5	99
AUG. 16...	2200	8.4	24.0	9.2	115
SEP. 28...	1800	9.1	20.5	8.3	99

07146500 ARKANSAS RIVER AT ARKANSAS CITY, KANS.--Continued
(Irrigation network station)

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1360	549	1370	2160	2200	2460	2370	1730	540	1760	1720	1300
2	1350	529	1450	2140	2760	2430	2490	1230	561	1750	1520	796
3	1400	459	1470	2370	2970	2420	2540	1100	708	1530	1590	858
4	1430	350	1540	2350	2450	2390	2410	600	778	1410	1590	838
5	1310	394	1610	2620	2530	3130	2440	800	1060	1410	1710	652
6	1450	485	1680	2640	2260	2470	2450	1060	1530	1470	1780	573
7	1460	632	1720	2210	2200	2440	2460	1090	2440	1390	1940	457
8	1400	971	1710	2100	2150	2450	2470	1210	2450	1290	1940	438
9	1460	1050	1760	1990	2320	2540	2390	1170	2540	1280	2110	511
10	1390	1180	1730	2160	2290	2480	2370	1430	2480	1360	1640	507
11	1370	1230	1840	2100	2710	2480	2390	1750	2480	1300	2090	768
12	1380	1300	1780	2100	2390	2410	2410	1800	2410	1500	2500	854
13	1470	1320	1850	1980	2320	2410	2440	1630	2410	1510	2910	1060
14	1510	1450	1860	2700	2210	2320	2470	1400	2090	1260	2150	1100
15	1440	1560	1180	2690	2100	2320	2320	1450	2060	1220	2460	1130
16	1350	1610	1500	2920	2170	2460	2350	1580	1720	1360	1930	1070
17	1350	1590	1580	2020	2180	---	2480	1690	1880	1370	2310	1160
18	1340	1590	1750	2060	2220	2400	2440	1840	1910	1300	2160	1150
19	1350	701	1850	2400	2230	---	2380	1940	1160	1360	2340	1320
20	1230	1120	1940	2370	2300	2450	2460	2110	1200	1260	2330	1440
21	1310	1170	1950	2400	2350	2370	2340	2290	1110	1330	2290	1530
22	1370	399	1990	1780	2340	2490	1850	2300	1060	1480	2190	1590
23	1460	402	1990	2210	2360	2420	2080	2300	1290	1610	2400	1650
24	1460	492	2340	2140	2330	2320	2090	2340	1370	1680	2440	1840
25	1430	647	2080	2080	2360	2300	2130	2540	1460	1640	3200	1960
26	1360	951	2270	2070	2400	2460	2150	2250	1570	1690	1250	1820
27	1520	943	2050	2840	2380	2400	1880	2360	1650	1700	1660	1750
28	1410	1160	2010	2560	2320	2270	1520	1850	1620	1720	1130	1960
29	1230	1140	2110	2800	2520	2350	1440	1990	1800	1880	1870	1900
30	811	1300	2070	2620	---	2360	1700	1380	1690	1520	1630	1900
31	446	---	2190	2310	---	2450	---	792	---	1790	1770	---
MONTH	1340	956	1810	2320	2360	2440	2260	1650	1630	1490	2020	1200

TEMPERATURE (°C) OF WATER, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.0	---	4.0	---	---	10.0	11.0	19.0	22.0	25.0	---	---
2	23.0	---	4.0	---	---	---	14.0	18.0	22.5	25.0	---	---
3	22.0	---	3.5	---	---	5.5	13.5	18.0	24.0	24.5	---	---
4	21.0	---	3.5	---	---	6.0	11.5	17.0	---	22.0	---	---
5	20.5	---	4.0	---	---	---	14.5	17.5	26.5	22.5	---	---
6	21.0	10.5	5.0	---	1.0	---	19.0	17.5	---	23.0	---	---
7	20.5	7.0	5.5	---	---	---	19.0	15.5	---	21.5	---	---
8	19.0	6.0	5.5	---	---	---	14.0	15.5	---	22.0	---	---
9	17.0	8.0	4.5	---	---	---	13.5	15.5	---	25.0	---	---
10	16.5	8.5	5.5	---	1.0	---	17.5	16.5	---	25.5	---	---
11	17.5	---	5.0	---	---	---	22.0	18.0	---	24.5	---	---
12	18.5	---	5.5	---	1.0	---	22.5	20.0	---	23.5	---	---
13	18.5	---	4.5	---	2.0	---	22.0	20.0	---	26.5	---	---
14	18.5	---	6.0	---	5.5	---	22.5	19.0	26.0	27.0	---	---
15	20.0	---	---	---	4.5	---	15.0	21.0	25.0	25.0	---	---
16	21.0	---	---	0.0	7.0	---	16.5	23.5	25.5	23.0	---	---
17	20.5	---	---	---	8.5	---	18.5	25.0	25.0	24.0	---	---
18	20.5	---	---	3.5	6.5	---	20.0	25.0	24.5	23.0	---	---
19	19.5	---	---	5.5	6.0	---	21.0	24.5	24.5	24.5	---	---
20	19.0	---	---	3.0	7.5	---	19.0	24.5	25.0	26.5	---	25.0
21	18.0	---	---	1.0	10.5	17.5	16.0	25.0	24.0	27.0	---	21.5
22	17.5	---	5.0	4.5	5.0	15.5	18.0	24.5	23.0	26.5	---	20.0
23	17.5	5.5	6.5	5.0	7.0	14.5	19.0	24.0	22.0	27.0	---	21.0
24	18.5	5.5	7.5	---	10.0	11.0	18.0	24.5	26.0	28.0	---	23.5
25	18.0	6.0	9.5	---	9.5	13.0	12.5	26.0	28.5	28.0	---	25.0
26	17.5	7.0	10.5	---	8.0	15.0	11.0	25.5	27.5	27.5	---	22.0
27	16.5	6.5	---	---	8.5	16.0	13.0	23.5	29.0	27.5	---	22.5
28	17.5	6.5	0.0	---	11.0	11.0	15.5	24.0	28.5	26.5	---	---
29	15.5	5.0	0.0	---	16.5	10.5	16.5	23.0	27.0	---	---	---
30	13.5	4.5	0.0	---	---	12.0	19.0	22.0	27.5	---	---	---
31	---	---	---	---	---	11.5	---	21.5	---	---	---	---
MONTH	19.0	---	---	---	---	---	17.0	21.0	---	25.0	---	---

07146500 ARKANSAS RIVER AT ARKANSAS CITY, KANS.--Continued
(Irrigation network station)

DISSOLVED SULFATE (SO_4), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	50	130	200	200	570	420	160	49	160	160	120
2	120	48	130	200	1000	520	610	110	51	160	140	73
3	130	42	130	420	1400	500	690	100	65	140	150	78
4	130	32	140	390	550	460	490	56	71	130	150	77
5	120	36	150	820	680	1600	530	73	97	130	160	60
6	130	44	150	850	250	580	550	97	140	130	160	52
7	130	58	160	200	200	530	570	100	530	130	180	42
8	130	89	160	190	200	550	580	110	550	120	180	40
9	130	96	160	180	350	690	460	110	690	120	190	47
10	130	110	160	200	300	600	420	130	600	120	150	46
11	130	110	170	190	960	600	460	160	600	120	190	70
12	130	120	160	190	460	490	490	170	490	140	630	78
13	130	120	170	180	350	490	530	150	490	140	1300	97
14	140	130	170	940	200	350	580	130	190	120	200	100
15	130	140	110	930	190	350	350	130	190	110	570	100
16	120	150	140	1300	200	570	390	150	160	120	180	98
17	120	150	150	190	200	---	600	160	170	130	330	110
18	120	150	160	190	200	470	530	170	180	120	200	110
19	120	64	170	470	200	---	440	180	110	120	380	120
20	110	100	180	420	310	550	570	190	110	120	360	130
21	120	110	180	470	390	420	380	300	100	120	300	140
22	130	37	180	160	380	610	170	310	97	140	200	150
23	130	37	180	200	410	500	190	310	120	150	470	150
24	130	45	380	200	360	350	190	380	130	150	530	170
25	130	59	190	190	410	310	200	690	130	150	1700	180
26	120	87	270	190	470	570	200	240	140	160	110	170
27	140	86	170	1200	440	470	170	410	150	160	150	160
28	130	110	180	720	350	270	180	170	150	160	100	180
29	110	100	190	1100	660	390	130	180	170	170	170	170
30	74	120	190	820	---	410	160	130	160	140	150	170
31	41	---	200	330	---	550	---	72	---	160	160	---
MONTH	120	87	170	460	420	530	410	190	230	140	320	110

DISSOLVED SULFATE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	302	873	711	603	329	896	643	348	508	242	224	319
2	301	644	720	592	1740	775	931	419	405	328	253	305
3	312	908	708	1250	1660	729	1010	663	317	300	256	377
4	325	609	723	878	742	664	677	363	236	258	202	331
5	279	502	704	1210	1280	2370	711	348	251	282	190	282
6	313	470	689	1260	572	855	712	322	301	333	182	307
7	312	375	675	355	349	780	743	328	996	312	189	315
8	300	410	655	421	301	806	758	389	908	272	185	323
9	334	363	661	436	643	980	593	294	1040	244	188	231
10	301	341	662	497	537	827	539	301	840	246	135	173
11	281	319	673	529	1470	831	577	338	806	208	160	216
12	274	314	629	493	578	699	615	361	607	253	500	208
13	298	401	640	421	602	701	662	451	577	275	962	242
14	299	383	707	1650	371	507	709	418	230	232	138	266
15	290	341	732	1250	380	519	442	372	281	218	395	313
16	272	319	797	2090	472	852	491	359	235	270	124	291
17	272	304	722	349	474	---	704	349	244	284	219	280
18	288	392	653	407	419	715	616	345	284	286	125	249
19	291	466	626	1100	378	---	522	329	242	283	233	258
20	313	553	623	944	537	833	765	332	356	225	226	259
21	316	662	612	1120	662	654	645	491	304	218	178	262
22	336	616	609	405	616	933	336	493	248	251	118	256
23	360	744	600	474	664	737	296	464	271	279	309	250
24	361	614	1200	424	575	512	263	533	269	269	306	271
25	385	539	606	385	657	482	251	989	265	250	1340	274
26	339	679	843	361	753	901	258	339	259	246	182	240
27	326	613	587	1810	699	717	296	707	256	228	243	236
28	394	702	566	583	545	394	323	382	248	220	118	278
29	331	650	594	1060	1050	588	268	464	249	272	164	236
30	877	706	583	1060	---	612	285	542	230	258	167	224
31	684	---	611	492	---	812	---	583	---	249	243	---
MONTH	344	527	681	804	692	782	555	433	409	261	273	269

07146500 ARKANSAS RIVER AT ARKANSAS CITY, KANS.--Continued
(Irrigation network station)

DISSOLVED CHLORIDE (CL), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	260	84	270	440	450	530	500	350	82	350	340	250
2	260	80	280	440	610	520	540	240	87	350	300	140
3	270	64	290	500	680	520	550	210	120	300	320	150
4	280	40	300	490	520	510	510	97	140	280	320	150
5	250	50	320	570	550	720	520	140	200	280	340	110
6	280	70	340	580	470	530	520	200	300	290	360	90
7	290	100	340	450	450	520	530	200	520	270	390	64
8	270	180	340	430	440	520	530	230	520	250	390	60
9	290	200	350	400	490	550	510	220	550	250	430	76
10	270	220	350	440	480	530	500	280	530	260	330	75
11	270	240	370	430	600	530	510	350	530	250	430	130
12	270	250	360	430	510	510	510	360	510	300	540	150
13	290	260	370	400	490	510	520	320	510	300	660	200
14	300	280	380	600	450	490	530	270	430	240	440	210
15	280	310	220	590	430	490	490	280	420	230	530	210
16	260	320	300	660	440	530	490	310	340	260	390	200
17	260	320	310	410	450	---	530	340	380	270	480	220
18	260	320	350	420	460	510	520	370	390	250	440	220
19	260	120	370	510	460	---	500	390	220	260	490	260
20	240	210	390	500	480	520	530	430	230	240	490	280
21	250	220	400	510	490	500	490	480	210	260	480	300
22	270	51	400	360	490	540	370	480	200	290	450	320
23	290	52	400	450	500	520	420	480	250	320	510	330
24	290	72	490	440	490	490	430	490	270	340	520	370
25	280	110	420	420	500	480	430	550	290	330	740	400
26	260	170	470	420	510	530	440	470	310	340	240	370
27	300	170	420	640	500	510	380	500	330	340	330	350
28	280	220	410	560	490	470	300	370	320	340	210	400
29	240	220	430	630	540	490	280	400	360	380	380	380
30	140	250	420	570	---	500	340	270	340	300	320	380
31	61	---	450	480	---	520	---	140	---	360	360	---
MONTH	260	170	370	490	500	520	470	330	330	290	420	230

DISSOLVED CHLORIDE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	641	1460	1510	1350	735	834	758	760	846	529	490	673
2	638	1060	1540	1320	1037	774	813	876	685	718	545	582
3	664	1390	1520	1470	821	746	803	1360	584	647	553	734
4	693	763	1560	1100	707	737	711	636	448	551	437	641
5	588	695	1530	851	1030	1060	693	665	511	602	414	506
6	669	742	1500	860	1070	779	678	656	648	713	400	525
7	668	665	1480	795	780	760	692	672	971	663	417	481
8	639	821	1430	938	671	767	690	810	865	572	409	462
9	714	738	1450	966	903	779	658	608	830	512	419	375
10	641	708	1450	1110	858	737	636	642	749	521	294	279
11	597	667	1480	1180	923	741	640	739	718	439	356	409
12	583	662	1380	1100	642	735	646	791	638	584	429	405
13	639	847	1410	933	846	736	645	979	606	592	498	494
14	643	820	1560	1050	830	713	646	891	513	486	307	545
15	620	736	1520	802	847	728	621	797	624	455	368	644
16	577	691	1710	1070	1050	793	618	777	512	574	274	593
17	577	657	1560	775	1060	---	628	762	538	604	320	579
18	610	848	1430	905	942	772	600	760	626	603	279	514
19	618	856	1380	1190	850	---	597	728	500	601	304	545
20	654	1140	1380	1110	819	793	712	740	740	473	306	558
21	668	1370	1350	1210	834	771	841	785	625	461	284	564
22	713	861	1350	889	802	815	740	753	506	538	265	555
23	770	1050	1330	1060	808	754	658	708	569	604	334	544
24	772	976	1560	986	778	719	586	695	571	587	298	597
25	822	964	1350	857	800	735	561	787	568	542	578	606
26	720	1350	1490	803	813	838	575	669	561	536	382	527
27	702	1220	1310	995	800	775	653	860	556	497	528	515
28	839	1450	1260	449	765	695	696	840	539	482	244	615
29	692	1340	1320	602	868	740	573	1030	546	599	360	521
30	1680	1490	1300	744	---	745	622	1150	502	555	362	495
31	1030	---	1370	720	---	773	---	1110	---	547	533	---
MONTH	712	968	1440	972	851	770	666	808	623	560	387	537

07146500 ARKANSAS RIVER AT ARKANSAS CITY, KANS.--Continued
(Irrigation network station)

DISSOLVED SOLIDS, IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	798	322	804	1310	1340	1510	1450	1020	317	1030	1010	763
2	793	311	851	1290	1720	1490	1540	722	329	1030	892	467
3	822	269	863	1450	1870	1490	1570	646	416	898	934	504
4	840	205	904	1440	1510	1470	1480	357	457	828	934	492
5	769	231	945	1630	1560	1980	1500	470	622	828	1000	383
6	851	285	986	1640	1380	1520	1510	622	898	863	1050	336
7	857	371	1010	1340	1340	1500	1510	640	1500	816	1160	268
8	822	570	1000	1270	1300	1510	1520	710	1510	757	1160	257
9	857	616	1030	1190	1420	1570	1470	684	1570	752	1270	300
10	816	693	1020	1310	1400	1530	1450	840	1530	798	963	298
11	804	722	1090	1270	1690	1530	1470	1030	1530	763	1260	451
12	810	763	1050	1270	1470	1480	1480	1060	1480	881	1540	501
13	863	775	1090	1180	1420	1480	1500	957	1480	887	1830	622
14	887	851	1100	1680	1340	1420	1520	822	1260	740	1300	646
15	845	916	693	1670	1270	1420	1420	851	1240	716	1510	663
16	793	945	881	1830	1310	1510	1440	928	1010	798	1150	628
17	793	934	928	1210	1320	---	1530	992	1110	804	1410	681
18	787	934	1030	1240	1350	1470	1500	1090	1130	763	1310	675
19	793	412	1090	1470	1360	---	1460	1160	681	798	1430	775
20	722	658	1160	1450	1400	1510	1510	1270	705	740	1420	845
21	769	687	1160	1470	1440	1450	1430	1400	652	781	1400	898
22	804	234	1190	1050	1430	1540	1090	1400	622	869	1330	934
23	857	236	1190	1340	1450	1490	1250	1400	757	945	1470	969
24	857	289	1430	1290	1420	1420	1260	1430	804	986	1500	1090
25	840	380	1250	1250	1450	1400	1290	1570	857	963	2030	1170
26	798	558	1380	1250	1470	1510	1300	1370	922	992	734	1070
27	892	554	1230	1780	1460	1470	1110	1450	969	998	975	1030
28	828	681	1200	1580	1420	1380	892	1090	951	1010	663	1170
29	722	669	1270	1750	1560	1440	845	1190	1060	1110	1110	1130
30	476	763	1250	1630	---	1450	998	810	992	892	957	1130
31	262	---	1330	1410	---	1510	---	465	---	1050	1040	---
MONTH	788	561	1080	1420	1440	1500	1380	982	979	874	1220	705

DISSOLVED SOLIDS (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1940	5600	4560	3990	2180	2400	2200	2230	3260	1550	1440	2050
2	1930	4130	4620	3910	2880	2230	2330	2690	2600	2110	1620	1960
3	2000	5830	4540	4280	2270	2160	2290	4250	2030	1930	1640	2420
4	2080	3910	4640	3220	2040	2140	2060	2330	1520	1660	1300	2130
5	1790	3220	4520	2410	2950	2890	2000	2230	1610	1810	1220	1810
6	2010	3010	4420	2430	3140	2240	1950	2070	1930	2130	1170	1970
7	2000	2400	4340	2360	2310	2190	1990	2110	2800	2000	1230	2020
8	1920	2630	4200	2780	1990	2210	1980	2490	2490	1740	1200	2080
9	2140	2330	4240	2850	2640	2230	1910	1880	2370	1560	1240	1480
10	1930	2190	4250	3290	2520	2120	1850	1930	2150	1580	868	1110
11	1800	2050	4340	3490	2600	2130	1860	2170	2060	1340	1050	1390
12	1760	2020	4030	3250	1860	2130	1870	2320	1850	1620	1230	1340
13	1910	2570	4130	2750	2470	2130	1860	2090	1750	1770	1380	1560
14	1920	2460	4570	2950	2460	2080	1860	2690	1520	1490	909	1710
15	1860	2190	4700	2260	2510	2130	1810	2390	1850	1400	1060	2010
16	1750	2050	5110	2970	3130	2280	1800	2310	1510	1740	806	1870
17	1750	1950	4630	2290	3180	---	1800	2240	1580	1820	937	1790
18	1850	2510	4190	2670	2790	2240	1730	2230	1840	1840	826	1600
19	1870	2990	4040	3440	2510	---	1730	2140	1550	1820	885	1660
20	2010	3550	4050	3240	2400	2280	2050	2190	2280	1450	893	1660
21	2030	4250	3980	3490	2430	2240	2450	2300	1950	1400	834	1680
22	2150	3950	3980	2600	2340	2340	2170	2210	1590	1610	785	1650
23	2310	4770	3920	3140	2350	2180	1950	2070	1740	1790	967	1610
24	2310	3940	4560	2800	2270	2100	1730	2030	1730	1730	859	1750
25	2470	3460	3990	2540	2330	2150	1660	2250	1700	1600	1580	1790
26	2180	4360	4370	2370	2360	2410	1700	1970	1660	1580	1170	1550
27	2090	3930	3860	2770	2320	2240	1920	2500	1640	1460	1560	1510
28	2530	4510	3700	1280	2240	2040	2070	2460	1590	1420	760	1810
29	2130	4170	3920	1680	2480	2160	1720	3030	1600	1760	1060	1530
30	5630	4530	3830	2110	---	2170	1830	3480	1480	1660	1070	1460
31	4390	---	4050	2110	---	2230	---	3740	---	1600	1560	---
MONTH	2210	3380	4270	2830	2480	2220	1940	2450	1910	1680	1130	1730

07150500 SALT FORK ARKANSAS RIVER NEAR JET, OKLA.

LOCATION.--Lat 36°45'11", long 98°07'44", in NE1/4NE1/4 sec.11, T.26 N., R.9 W., Alfalfa County, at gaging station at bridge on county road, 0.6 mi (1.0 km) downstream from Great Salt Plains Dam, 4.0 mi (6.9 km) upstream from Wagon Creek, 6.0 mi (9.6 km) northeast of Jet, and at mile 102.7 (165.2 km).

DRAINAGE AREA.--3,202 sq mi (8,293.2 km^2), of which 8.0 sq mi (20.7 km^2) is probably noncontributing.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
OCT.								
05...	1.8	4600	134	0	700	7000	--	13000
15...	3.5	5000	158	0	720	7500	--	14000
25...	3.4	5200	164	0	760	7800	--	14300
NOV.								
05...	320	2100	110	2	420	3200	1.0	6150
15...	156	2900	122	0	460	4400	1.3	8260
25...	365	2300	132	0	450	3500	1.5	6690
DEC.								
05...	253	2400	142	0	470	3600	.80	7020
15...	228	2300	152	0	460	3500	1.3	6720
24...	178	2200	162	0	460	3400	1.7	6640
JAN.								
05...	46	2300	158	0	410	3500	2.7	6820
15...	68	2200	176	0	420	3400	1.6	6670
25...	84	2100	172	0	400	3200	2.2	6360
FEB.								
05...	184	2300	166	0	450	3400	1.1	6680
15...	112	2000	174	0	430	3200	2.6	6210
25...	61	2100	182	0	440	3200	2.2	6280
MAR.								
05...	65	2100	184	0	460	3200	2.4	6230
15...	43	2100	188	0	480	3200	2.7	6230
25...	8.6	2200	170	0	460	3400	.40	6600
APR.								
05...	21	2400	200	0	500	3700	2.2	7340
15...	20	2400	196	0	520	3700	2.2	7170
25...	12	2300	196	0	480	3600	1.8	7000
MAY								
05...	270	2400	160	0	450	3600	.80	7150
15...	332	2300	144	0	420	3500	1.0	6820
25...	56	2500	142	0	440	3800	1.7	7250
JUNE								
05...	14	3100	128	0	560	4600	1.9	8760
15...	5.5	3500	100	0	600	5300	--	9640
25...	340	3300	90	0	560	5200	--	9220
JULY								
05...	609	2700	86	0	500	4100	1.7	7620
15...	124	2200	100	0	510	3300	1.7	6260
25...	420	1700	84	0	460	2500	1.7	4930
AUG.								
05...	38	2100	84	0	470	3300	2.0	6500
15...	2.1	2800	86	0	540	4300	2.4	8140
25...	4.5	2400	110	0	540	3700	2.2	7130
SEP.								
05...	240	2700	86	0	450	4200	.80	7950
15...	128	2200	112	0	420	3400	1.0	6610
25...	82	2400	104	0	440	3700	1.0	7110

07150500 SALT FORK ARKANSAS RIVER NEAR JET, OKLA.

PERIOD OF RECORD.--Chemical analyses: October 1953 to September 1959, water years 1960-61 (partial-record station), October 1961 to September 1963, July 1968 to current year.
Water temperatures: October 1954 to September 1955, October 1957 to September 1959, October 1961 to September 1963, July 1968 to current year.

REMARKS.--Continuous monitor records for water temperature and specific conductance are collected for this station.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.							
05...	17.7	63.2	860	750	68	20500	7.7
15...	19.0	132	940	810	71	21800	7.8
25...	19.4	131	960	825	73	22400	7.8
NOV.							
05...	8.36	5310	510	420	40	9840	8.0
15...	11.2	3480	600	500	52	13200	7.7
25...	9.10	6590	560	458	42	10800	7.6
DEC.							
05...	9.55	4800	590	470	43	11300	8.1
15...	9.14	4140	590	470	41	10700	7.7
28...	9.03	3190	600	470	39	10600	7.8
JAN.							
05...	9.20	847	620	490	40	11100	7.4
15...	9.07	1220	630	490	38	10800	8.3
25...	8.65	1480	610	470	37	10200	7.5
FEB.							
05...	9.08	3320	620	480	40	10400	8.3
15...	8.45	1080	620	480	35	9920	7.6
25...	8.54	1030	660	510	36	9970	7.8
MAR.							
05...	8.47	1090	620	470	37	10100	7.5
15...	8.47	723	640	490	36	9970	7.7
25...	8.98	153	640	500	38	10700	8.3
APR.							
05...	9.98	416	700	540	39	11900	7.7
15...	9.75	387	710	550	39	11700	7.6
25...	9.52	227	700	540	38	11200	7.7
MAY							
05...	9.72	5210	640	510	41	11500	7.9
15...	9.20	6110	610	490	41	11000	7.6
25...	9.86	1100	630	510	43	11800	7.6
JUNE							
05...	11.9	331	690	590	51	13700	7.0
15...	13.1	163	700	620	58	15600	6.7
25...	12.5	8460	670	600	55	14800	6.5
JULY							
05...	10.4	12500	590	520	48	12400	6.8
15...	8.51	2100	600	520	39	10300	6.7
25...	6.70	5590	530	460	32	8120	6.5
AUG.							
05...	8.84	667	620	550	37	10200	6.7
15...	11.1	46.2	660	590	47	13000	6.4
25...	9.70	86.6	630	540	42	11500	6.9
SEP.							
05...	10.8	5150	580	514	48	12800	6.5
15...	8.99	2280	580	490	46	10800	6.9
25...	9.67	1570	600	520	43	11500	7.1

07150500 SALT FORK ARKANSAS RIVER NEAR JET, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19500	17000	10100	10800	11000	9940	11600	11600	12400	13000	10200	12200
2	20100	14200	12000	10700	11100	10000	11900	10800	12200	13000	9650	12400
3	20600	12200	11500	11100	11000	10300	11900	11000	12400	12900	9030	12500
4	20500	10800	11700	11200	10900	10400	12400	12400	13000	12800	9670	12700
5	20900	10000	11400	11500	10400	10400	12100	11500	13700	12400	9930	12800
6	20600	13300	11600	11400	10400	10400	11700	11400	14300	11200	11300	8640
7	20800	14300	10500	11600	8620	9750	10800	11900	14200	11000	10500	9010
8	22000	14200	11500	11300	11400	10100	11800	12000	15600	9780	11300	10800
9	22200	14100	11500	11300	10200	10200	12400	12200	16000	9030	10800	12100
10	20900	14000	11300	11200	11600	10400	12100	12400	16400	8990	10100	11800
11	21900	12500	11100	11100	10400	9900	11900	12400	16400	8180	9510	11400
12	21700	12900	11100	10900	10400	10100	10400	11900	16000	8710	11400	10200
13	21800	12500	11200	10100	10400	10100	11000	11400	16000	10100	10600	9570
14	21800	13100	11200	10700	10300	10400	11100	10100	15600	8630	12500	10400
15	21800	13500	10900	11000	10000	10200	11700	10900	15600	10300	13000	10800
16	20900	13200	11300	11000	9870	10400	11200	10100	16000	10600	12500	10700
17	20900	13200	10800	11000	9200	10300	12600	10600	16600	10600	10800	10200
18	21100	13300	10600	11200	9410	10200	12900	10900	17100	9940	11800	10200
19	21200	13300	10300	11300	9990	9720	12200	11300	16700	10000	12000	10900
20	21900	9180	10800	11300	9890	9770	12100	11500	17200	10300	13000	11300
21	20400	12100	10800	11100	8670	10100	10700	11300	17500	9610	12600	11600
22	23300	12300	10800	10500	13400	12500	10500	10300	17900	8950	12400	11900
23	21800	12400	11000	10400	10700	11000	11100	11300	14400	5460	15900	10700
24	20400	11300	10800	10500	10500	11500	11100	11600	14700	6930	12000	11100
25	22400	11000	10900	10400	10800	11100	11300	11700	14800	8300	11500	11200
26	20600	11200	10700	10600	10300	10300	11600	11600	14400	6670	12400	12100
27	20500	11500	10900	10700	10400	10700	12300	11700	14400	7770	12700	12000
28	21000	11600	11100	10800	10100	11700	11800	11700	14200	8430	11800	12000
29	17700	11900	10100	10700	9830	11700	11900	11700	17500	9250	11800	12400
30	17500	12100	10800	10800	---	11500	12100	12200	12800	9270	12300	12300
31	17400	---	10600	10900	---	11500	---	12200	---	10500	12600	---
MONTH	20840	12610	11000	10940	10380	10530	11670	11470	15200	9760	11540	11260

TEMPERATURE (°C) OF WATER, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.5	---	4.0	7.0	2.5	10.5	12.0	17.5	---	---	27.0	---
2	24.0	---	2.0	6.5	2.0	9.0	12.5	18.0	---	---	27.5	---
3	22.0	---	3.5	---	2.0	7.5	12.5	19.0	---	---	28.0	---
4	21.5	---	3.5	---	2.5	6.0	11.0	18.0	---	---	26.5	---
5	22.0	---	3.0	---	3.0	7.0	12.0	---	---	---	26.5	---
6	21.5	---	1.5	---	2.5	8.0	14.5	---	---	26.0	28.0	23.5
7	20.0	---	2.0	---	1.5	9.5	15.0	---	---	---	27.5	25.5
8	---	---	---	3.5	2.5	7.5	13.0	---	---	---	27.0	25.5
9	---	---	---	3.0	2.0	9.5	12.5	---	---	---	26.0	26.0
10	---	---	---	3.5	1.0	11.5	14.0	17.5	---	---	26.5	26.5
11	---	---	---	3.5	0.5	14.0	16.5	17.5	---	---	26.5	27.5
12	---	---	---	4.5	1.0	15.0	18.0	18.5	---	---	26.5	27.5
13	---	---	---	3.5	2.0	14.5	---	19.5	---	---	26.5	27.0
14	---	---	---	1.0	3.5	14.5	---	19.0	---	---	26.0	26.0
15	---	---	---	0.5	4.0	15.5	---	19.5	---	---	26.5	26.0
16	---	14.5	3.5	0.5	5.0	15.0	---	22.0	---	---	26.0	26.0
17	---	15.0	3.0	1.5	6.5	15.0	---	22.5	---	---	---	26.5
18	---	13.5	4.5	3.0	6.5	14.0	---	22.0	---	---	---	27.0
19	---	11.5	7.0	2.5	6.5	14.5	19.0	23.0	---	---	---	26.5
20	---	10.0	---	3.0	7.5	14.0	17.0	24.0	---	27.0	---	25.5
21	---	10.5	3.0	3.0	8.5	14.5	17.5	25.0	---	28.0	---	23.5
22	---	9.5	3.5	3.5	6.5	15.5	18.0	25.0	---	28.0	---	22.0
23	---	7.5	8.0	4.0	7.5	12.5	16.0	24.5	---	28.0	---	21.0
24	---	7.0	8.5	4.5	9.0	11.5	16.0	25.0	---	28.5	---	21.5
25	---	7.5	10.0	3.5	8.5	11.0	14.0	24.5	---	29.0	---	22.5
26	---	7.5	9.0	3.0	8.0	13.5	12.5	23.5	---	29.0	---	21.0
27	---	7.5	8.0	1.0	9.0	13.0	15.0	23.5	---	29.5	---	22.5
28	---	7.5	7.5	0.5	10.0	11.5	16.0	24.5	---	29.0	---	22.0
29	---	6.0	7.5	1.0	11.0	10.5	16.0	24.0	29.0	29.0	---	19.0
30	---	5.0	7.5	2.0	---	11.0	16.0	23.0	29.5	28.5	---	19.0
31	---	---	7.0	2.5	---	11.5	---	---	---	27.5	25.0	---
MONTH	---	---	---	3.0	5.0	12.0	15.0	21.5	---	---	---	24.5

07150500 SALT FORK ARKANSAS RIVER NEAR JET, OKLA.--Continued

DISSOLVED SULFATE (SO_4), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972 (CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	720	660	420	440	450	410	470	470	500	520	420	490
2	730	560	480	440	450	410	480	440	490	520	400	500
3	740	490	470	450	450	420	480	450	500	520	400	500
4	730	440	470	460	450	430	500	500	520	510	400	510
5	740	410	460	470	430	430	490	470	540	500	410	510
6	740	530	470	460	430	430	470	460	560	460	460	400
7	740	560	430	470	400	410	440	480	560	450	430	400
8	750	560	470	460	460	420	480	480	610	410	460	440
9	750	560	470	460	420	420	500	490	620	400	440	490
10	740	550	460	460	470	430	490	500	640	400	420	480
11	750	500	450	450	430	410	480	500	640	400	400	460
12	750	520	450	450	430	420	430	480	620	400	460	420
13	750	500	460	420	430	420	450	460	620	420	440	400
14	750	520	460	440	420	430	450	420	610	400	500	430
15	750	540	450	450	410	420	470	450	610	420	520	440
16	740	530	460	450	410	430	460	420	620	440	500	440
17	740	530	440	450	400	420	500	440	640	440	440	420
18	740	530	40	460	400	420	520	450	660	410	480	420
19	740	530	20	460	410	400	490	460	650	410	480	450
20	750	400	440	460	410	410	490	470	670	420	520	460
21	730	490	440	450	400	420	440	460	680	400	500	470
22	770	490	440	430	530	500	430	420	690	400	500	480
23	750	500	450	430	440	450	450	460	570	390	620	440
24	730	460	440	430	430	470	450	470	580	400	480	450
25	760	450	450	430	440	450	460	470	580	400	470	460
26	740	460	440	440	420	420	470	470	570	400	500	490
27	730	470	450	440	430	440	490	470	570	400	510	480
28	740	470	450	440	420	470	480	470	560	400	480	480
29	680	480	420	440	410	470	480	470	680	400	480	500
30	680	490	440	440	---	470	490	490	510	400	490	490
31	670	---	440	450	---	470	---	490	---	430	500	---
MONTH	740	510	450	450	430	430	470	470	600	430	470	460

DISSOLVED SULFATE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972 (CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	888	261	144	73	108	24	320	73	433	163	201
2	3.3	670	282	129	88	61	25	264	61	823	135	189
3	4.0	592	321	62	76	73	23	219	39	823	77	239
4	3.0	524	332	59	65	39	16	171	25	827	42	304
5	3.8	426	300	58	106	72	24	198	18	818	71	331
6	3.8	473	299	100	50	122	29	165	13	741	51	300
7	6.4	463	247	89	60	45	29	105	11	659	26	254
8	13	430	262	103	64	32	5.3	95	11	575	35	259
9	15	397	267	93	43	90	11	66	7.4	532	13	268
10	17	351	278	105	81	60	21	59	7.7	485	15	274
11	19	281	249	127	104	81	18	74	9.1	427	16	284
12	9.5	273	234	126	105	47	88	463	20	368	9.2	208
13	7.1	271	212	85	121	44	22	522	9.8	337	6.1	187
14	6.5	220	212	71	134	43	22	431	23	324	3.2	126
15	7.1	191	313	58	125	74	17	399	9.0	173	3.2	167
16	7.2	170	268	55	150	65	18	347	8.6	174	2.8	169
17	7.0	182	253	73	119	61	4.1	323	7.6	184	49	123
18	6.8	223	254	123	110	40	10	289	7.5	222	3.2	97
19	7.0	183	220	126	104	70	9.7	269	10	631	3.1	88
20	7.9	335	186	123	104	42	21	254	11	763	3.1	104
21	6.9	421	179	137	83	45	66	210	9.8	720	4.5	90
22	7.5	427	151	87	93	51	52	151	11	683	5.5	80
23	7.3	531	179	94	104	7.6	17	138	63	610	5.7	103
24	6.7	496	156	93	83	14	29	115	287	527	7.3	143
25	6.9	442	214	97	82	22	7.8	87	452	468	13	142
26	8.3	455	168	83	94	63	12	71	597	417	5.1	50
27	7.9	371	151	73	119	22	137	69	669	336	4.3	59
28	6.8	412	138	60	107	10	130	148	641	274	22	72
29	68	356	156	71	119	22	106	121	747	251	48	39
30	583	329	162	81	---	24	151	90	503	213	99	64
31	778	---	134	78	---	25	---	68	---	183	187	---
MONTH	53	393	227	92	95	51	38	203	145	484	36	166

07150500 SALT FORK ARKANSAS RIVER NEAR JET, OKLA.--Continued

DISSOLVED CHLORIDE (CL), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6700	5700	3000	3300	3300	2900	3600	3600	3900	4100	3000	3800
2	6900	4600	3700	3200	3400	2900	3700	3300	3800	4100	2800	3900
3	7100	3800	3500	3400	3300	3100	3700	3300	3900	4100	2600	3900
4	7100	3300	3600	3400	3300	3100	3900	3900	4100	4000	2800	4000
5	7200	2900	3500	3500	3100	3100	3800	3500	4400	3900	2900	4000
6	7100	4200	3600	3500	3100	3100	3600	3500	4600	3400	3500	2400
7	7200	4600	3100	3600	2400	2800	3300	3700	4600	3300	3100	2600
8	7600	4600	3500	3500	3500	3000	3700	3700	5100	2900	3500	3300
9	7700	4600	3500	3500	3000	3000	3900	3800	5300	2600	3300	3800
10	7200	4500	3500	3400	3600	3100	3800	3900	5500	2600	3000	3700
11	7600	3900	3400	3400	3100	2900	3700	3900	5500	2300	2800	3500
12	7500	4100	3400	3300	3100	3000	3100	3700	5300	2500	3500	3000
13	7600	3900	3400	3000	3100	3000	3300	3500	5300	3000	3200	2800
14	7600	4200	3400	3200	3100	3100	3400	3000	5100	2400	3900	3100
15	7600	4300	3300	3300	2900	3000	3600	3300	5100	3100	4100	3300
16	7200	4200	3500	3300	2900	3100	3400	3000	5300	3200	3900	3200
17	7200	4200	3300	3300	2600	3100	4000	3200	5500	3200	3300	3000
18	7300	4200	3200	3400	2700	3000	4100	3300	5700	2900	3700	3000
19	7300	4200	3100	3500	2900	2800	3800	3500	5600	2900	3700	3300
20	7600	2600	3300	3500	2900	2900	3800	3500	5800	3100	4100	3500
21	7000	3800	3300	3400	2500	3000	3200	3500	5900	2800	4000	3600
22	---	3800	3300	3100	4300	3900	3100	3100	6000	2500	3900	3700
23	7600	3900	3300	3100	3200	3300	3400	3500	4700	1400	5300	3200
24	7000	3500	3300	3100	3100	3500	3400	3600	4800	1900	3700	3400
25	7800	3300	3300	3100	3300	3400	3500	3600	4800	2300	3500	3400
26	7100	3400	3200	3200	3100	3100	3600	3600	4700	1800	3900	3800
27	7100	3500	3300	3200	3100	3200	3800	3600	4700	2200	4000	3700
28	7300	3600	3400	3300	3000	3600	3700	3600	4600	2400	3700	3700
29	6000	3700	3000	3200	2900	3600	3700	3600	5900	2700	3700	3900
30	5900	3800	3300	3300	---	3500	3800	3800	4000	2700	3800	3800
31	5800	---	3200	3300	---	3500	---	3800	---	3100	4000	---
MONTH	7200	4000	3300	3300	3100	3200	3600	3500	5000	2900	3500	3400

DISSOLVED CHLORIDE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	7680	1870	1070	541	766	183	2430	567	3440	1170	1560
2	32	5490	2180	948	657	438	189	1950	473	6540	941	1480
3	38	4600	2430	465	568	530	179	1630	304	6530	492	1880
4	29	3860	2540	443	481	285	126	1330	200	6540	297	2400
5	37	3030	2260	439	771	520	183	1500	142	6390	504	2620
6	36	3790	2280	755	360	888	224	1250	106	5550	383	1830
7	62	3800	1800	675	367	315	211	807	89	4900	187	1620
8	130	3520	1980	775	481	226	40	735	92	4050	261	1910
9	154	3250	2020	700	310	645	85	514	63	3420	97	2080
10	164	2860	2090	784	618	436	163	462	66	3090	105	2100
11	193	2200	1860	948	754	573	140	577	78	2450	112	1840
12	96	2160	1750	935	763	339	637	3560	172	2270	70	1490
13	72	2120	1590	605	880	314	162	3940	83	2410	45	1300
14	65	1750	1590	522	968	310	164	3080	194	1980	25	913
15	72	1540	2320	433	891	531	127	2960	76	1250	26	1230
16	70	1360	2020	406	1060	469	138	2480	73	1270	22	1240
17	68	1450	1870	541	782	439	32	2360	66	1350	361	882
18	67	1790	1860	923	748	286	82	2140	65	1580	25	694
19	69	1470	1590	952	739	490	75	2020	90	4500	24	650
20	80	2200	1370	924	737	293	163	1930	100	5510	24	784
21	66	3260	1320	1020	510	322	487	1580	86	5020	35	685
22	---	3320	1120	636	751	403	382	1090	98	4330	43	618
23	74	4150	1330	679	765	57	128	1040	517	2250	48	757
24	64	3730	1150	679	602	105	219	878	2380	2510	56	1070
25	72	3290	1590	704	607	164	59	663	3750	2730	95	1060
26	81	3410	1230	610	678	455	90	540	4920	1900	40	387
27	76	2820	1120	539	863	165	1070	527	5510	1820	34	453
28	67	3140	1030	440	766	77	996	1130	5260	1630	168	554
29	596	2740	1110	522	840	166	817	927	6510	1660	365	304
30	5080	2540	1200	599	---	181	1170	699	3970	1420	769	499
31	6770	---	979	579	---	191	---	524	---	1330	1470	---
MONTH	484	3080	1690	685	685	367	291	1520	1200	3280	267	1230

07150500 SALT FORK ARKANSAS RIVER NEAR JET, OKLA.--Continued

DISSOLVED SOLIDS, IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12490	10710	6260	6690	6820	6160	7190	7190	7680	8060	6320	7560
2	12910	8800	7440	6630	6880	6200	7370	6690	7560	8060	5980	7680
3	13270	7560	7130	6880	6820	6380	7370	6820	7680	7990	5600	7750
4	13200	6690	7250	6940	6750	6440	7680	7680	8060	7930	5990	7870
5	13480	6200	7060	7130	6440	6440	7500	7130	8490	7680	6150	7930
6	13270	8240	7190	7060	6440	6440	7250	7060	8860	6940	7000	5350
7	13410	8860	6510	7190	5330	6040	6690	7370	8800	6820	6510	5580
8	14260	8800	7130	7000	7060	6260	7310	7440	9720	6060	7000	6690
9	14400	8740	7130	7000	6320	6320	7680	7560	10000	5600	6690	7500
10	13480	8680	7000	6940	7190	6440	7500	7680	10290	5570	6260	7310
11	14190	7750	6880	6880	6440	6130	7370	7680	10290	5070	5890	7060
12	14050	7990	6880	6750	6440	6260	6440	7370	10000	5400	7060	6320
13	14120	7750	6940	6260	6440	6260	6820	7060	10000	6260	6570	5930
14	14120	8120	6940	6630	6380	6440	6880	6260	9720	5350	7750	6440
15	14120	8370	6750	6820	6200	6320	7250	6750	9720	6380	8060	6690
16	13480	8180	7000	6820	6120	6440	6940	6260	10000	6570	7750	6630
17	13480	8180	6690	6820	5700	6380	7810	6570	10430	6570	6690	6320
18	13620	8240	6570	6940	5830	6320	7990	6750	10780	6160	7310	6320
19	13690	8240	6380	7000	6190	6020	7560	7000	10500	6200	7440	6750
20	14190	5690	6690	7000	6130	6050	7500	7130	10850	6380	8060	7000
21	13120	7500	6690	6880	5370	6260	6630	7000	11070	5950	7810	7190
22	15180	7620	6690	6510	8300	7750	6510	6380	11350	5550	7680	7370
23	14120	7680	6820	6440	6630	6820	6880	7000	8920	3380	9930	6630
24	13120	7000	6690	6510	6510	7130	6880	7190	9110	4290	7440	6880
25	14540	6820	6750	6440	6690	6880	7000	7250	9170	5140	7130	6940
26	13270	6940	6630	6570	6380	6380	7190	7190	8920	4130	7680	7500
27	13200	7130	6750	6630	6440	6630	7620	7250	8920	4810	7870	7440
28	13550	7190	6880	6690	6260	7250	7310	7250	8800	5220	7310	7440
29	11210	7370	6260	6630	6090	7250	7370	7250	11070	5730	7310	7680
30	11070	7500	6690	6690	---	7130	7500	7560	7930	5740	7620	7620
31	11000	---	6570	6750	---	7130	---	7560	---	6510	7810	---
MONTH	13440	7820	6810	6780	6440	6530	7230	7110	9490	6050	7150	6980

DISSOLVED SOLIDS (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	14460	3920	2190	1100	1610	369	4890	1120	6720	2440	3100
2	59	10520	4340	1950	1340	920	378	3990	939	12790	2000	2930
3	72	9120	4910	947	1160	1100	358	3330	602	12780	1070	3700
4	53	7930	5090	899	985	592	249	2630	392	12830	631	4720
5	69	6370	4580	885	1600	1080	364	3020	275	12630	1060	5140
6	68	7370	4580	1530	748	1840	450	2520	203	11280	775	4020
7	116	7270	3720	1360	806	669	434	1610	171	10010	386	3540
8	243	6750	4000	1570	973	473	81	1470	173	8570	529	3920
9	288	6230	4080	1420	648	1350	168	1020	119	7450	199	4130
10	306	5500	4230	1590	1240	905	324	913	125	6750	220	4210
11	360	4350	3790	1930	1570	1210	279	1140	147	5410	239	3720
12	178	4230	3570	1910	1580	710	1320	7110	324	4970	141	3120
13	133	4180	3220	1270	1830	659	331	7970	157	5050	92	2770
14	122	3420	3220	1070	2020	644	334	6460	367	4330	50	1900
15	133	2980	4740	883	1870	1110	254	6050	144	2600	50	2530
16	131	2650	4080	828	2250	974	281	5200	138	2620	44	2560
17	127	2830	3830	1100	1690	913	63	4880	124	2780	741	1840
18	125	3470	3830	1870	1610	597	160	4380	122	3330	49	1450
19	129	2850	3310	1930	1550	1040	149	4100	170	9450	48	1330
20	149	4760	2820	1870	1560	621	324	3890	188	11480	48	1590
21	124	6480	2710	2080	1120	676	1000	3200	161	10710	70	1380
22	148	6590	2290	1320	1460	795	791	2270	184	9460	85	1230
23	137	8190	2720	1410	1580	116	260	2100	988	5260	91	1560
24	120	7560	2370	1410	1250	212	446	1770	4530	5660	112	2170
25	133	6720	3250	1460	1250	334	119	1330	7130	6010	192	2150
26	150	6930	2540	1260	1410	948	180	1090	9400	4310	79	769
27	143	5680	2300	1110	1790	340	2120	1060	10530	4040	66	903
28	124	6310	2100	903	1610	155	1990	2270	10070	3580	336	1100
29	1120	5480	2330	1070	1780	333	1630	1860	12250	3590	730	602
30	9560	5060	2460	1230	---	366	2330	1390	7800	3060	1520	988
31	12740	---	2020	1190	---	385	---	1040	---	2760	2890	---
MONTH	884	6080	3450	1400	1430	764	585	3100	2300	6850	548	2500

07151000 SALT FORK ARKANSAS RIVER AT TONKAWA, OKLA.

LOCATION.--Lat 36°40'13", long 97°18'33",in NW1/4SE1/4 sec.4, T.25 N., R.1 W., Kay County, at gaging station at bridge on U.S. Highway 77 in Tonkawa, 4.0 mi (6.4 km) downstream from Thompson Creek, 7.8 mi (12.6 km) upstream from Chikaskia River, and at mile 33.8 (54.4 km).

DRAINAGE AREA.--4,528 sq mi (11,727.5 km²), of which 8.0 sq mi (20.7 km²) is probably noncontributing.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
OCT.								
05...	44	920	234	0	220	1400	1.2	2790
15...	29	1000	270	0	260	1500	1.1	3070
25...	39	590	170	0	140	880	.60	1860
NOV.								
05...	462	2200	118	0	390	3400	2.4	6670
15...	258	2300	152	0	370	3500	1.6	6770
25...	440	2200	148	0	380	3400	3.1	6560
DEC.								
05...	319	2200	162	4	420	3400	.90	6830
15...	2490	460	88	0	110	700	5.4	1450
25...	190	1800	196	0	370	2800	2.2	5510
JAN.								
05...	121	1800	224	0	340	2800	.90	5360
15...	65	1700	244	0	330	2600	2.5	4960
25...	147	1800	222	0	380	2800	5.4	5450
FEB.								
05...	150	1700	218	0	350	2700	2.2	5210
15...	152	1700	210	0	360	2600	2.0	5180
25...	128	1700	218	0	350	2600	.70	5120
MAR.								
05...	100	1700	208	0	340	2600	2.4	5280
15...	89	1600	258	0	360	2400	1.4	4850
25...	72	1600	246	4	370	2400	2.0	4860
APR.								
05...	51	1500	272	0	320	2300	.60	4530
15...	71	1600	238	0	340	2400	2.0	4760
25...	61	1500	244	0	340	2200	1.7	4440
MAY								
05...	200	2000	202	0	450	3000	2.3	6030
15...	542	1500	198	0	350	2200	3.2	4610
25...	123	2200	158	0	470	3300	2.5	6540
JUNE								
05...	38	2200	156	0	430	3400	1.9	6570
15...	25	1500	190	0	300	2400	2.9	4680
25...	188	990	248	0	200	1500	5.2	2980
JULY								
05...	800	2600	104	0	480	4000	1.9	7650
15...	345	2200	98	0	500	3300	1.5	6230
25...	715	1600	96	0	450	2500	.40	4910
AUG.								
06...	105	2000	122	0	460	3100	1.1	5920
15...	47	2100	144	0	440	3300	1.1	6090
25...	37	1800	142	0	360	2800	1.1	5220
SEP.								
05...	155	1700	106	0	340	2600	1.3	4910
15...	190	1700	106	0	400	2600	.80	4960
22...	424	520	68	0	120	800	5.1	1640

CHEMICAL ANALYSES OF ADDITIONAL SAMPLES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTANTANEOUS DISCHARGE (CFS)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND (MG/L)
OCT.			
28...	45	15	--
NOV.			
16...	234	15	3.1
DEC.			
14...	265	19	3.9
JAN.			
11...	146	16	2.4
FEB.			
08...	130	18	3.6
MAR.			
21...	84	28	2.9
APR.			
12...	42	15	4.4
MAY			
03...	287	84	9.5
JUNE			
14...	27	84	5.7
JULY			
06...	775	47	6.0
AUG.			
16...	43	31	5.2
SEP.			
27...	103	55	6.2

07151000 SALT FORK ARKANSAS RIVER AT TONKAWA, OKLA.

PERIOD OF RECORD.--Chemical analyses: September 1951 to September 1963, July 1968 to current year.
Water temperatures: November 1959 to September 1963, July 1968 to current year.

REMARKS.--Continuous monitor records for water temperature and specific conductance are collected for this station.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.							
05...	3.79	331	360	168	21	4780	8.1
15...	4.18	280	400	179	22	5260	8.1
25...	2.53	196	250	111	16	3240	8.3
NOV.							
05...	9.07	8320	480	383	44	10800	7.5
15...	9.21	4720	540	415	43	11100	7.9
25...	8.92	7790	540	419	41	10600	7.9
DEC.							
05...	9.29	5880	560	420	41	10600	8.4
15...	1.97	9750	160	88	16	2560	6.8
25...	7.49	2830	530	369	34	8710	7.8
JAN.							
05...	7.29	1750	560	380	33	9000	7.9
15...	6.75	870	550	350	32	8440	7.9
25...	7.41	2160	580	400	33	9140	7.7
FEB.							
05...	7.09	2110	550	370	32	8660	7.8
15...	7.04	2130	550	380	32	8580	7.7
25...	6.96	1770	540	360	32	8460	8.3
MAR.							
05...	7.18	1430	570	400	31	8600	8.1
15...	6.60	1170	560	350	29	8000	8.1
25...	6.61	945	560	350	29	8020	8.4
APR.							
05...	6.16	624	520	300	29	7810	8.2
15...	6.47	912	500	310	31	8160	7.7
25...	6.04	731	500	300	29	7620	7.8
MAY							
05...	8.20	3260	580	410	36	9600	7.7
15...	6.27	6750	470	310	30	7440	7.5
25...	8.89	2170	580	450	40	10300	7.4
JUNE							
05...	8.94	674	580	450	40	10700	7.5
15...	6.36	316	490	330	29	7830	7.7
25...	4.05	1510	320	120	24	5050	8.1
JULY							
05...	10.4	16500	580	500	47	12200	6.8
15...	8.47	5800	600	520	39	10200	6.6
25...	6.68	9480	560	480	29	8210	6.7
AUG.							
06...	8.05	1680	570	470	36	9670	6.8
15...	8.28	773	580	460	38	10100	7.0
25...	7.10	521	480	360	36	8650	7.4
SEP.							
05...	6.68	2060	440	350	35	8270	7.1
15...	6.75	2540	470	380	34	8400	7.5
22...	2.23	1880	180	120	17	2810	6.9

FIELD ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION
OCT.				
28...	3550	13.5	9.6	95
NOV.				
16...	9750	15.5	9.2	98
DEC.				
14...	8500	7.0	9.4	82
JAN.				
11...	7950	5.5	12.5	106
FEB.				
08...	9700	2.0	13.6	105
MAR.				
21...	7000	18.0	10.4	117
APR.				
12...	7400	29.0	10.4	143
MAY				
03...	4850	19.5	5.8	67
JUNE				
14...	8000	25.0	9.8	126
JULY				
06...	12700	23.0	9.3	113
AUG.				
16...	10200	28.0	10.4	139
SEP.				
27...	9200	25.0	9.2	116

07151000 SALT FORK ARKANSAS RIVER AT TONKAWA, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1860	1510	10800	9080	8820	8850	7770	8900	10300	14200	8300	1920
2	2780	3110	10900	9150	8360	8940	7770	5450	10400	12900	9370	2120
3	4100	8960	11000	8480	8460	8910	7780	5000	10600	13100	9340	6660
4	4700	9750	10800	8220	8460	8920	7780	8860	10600	12800	9340	6590
5	4720	10700	10800	8910	8700	8690	7810	9710	10600	11900	9810	8270
6	5600	10500	10800	9350	8890	8710	7700	9710	10600	12700	9370	11500
7	5760	12700	10700	8060	8870	8930	7940	9250	10500	12200	9770	11500
8	5750	12600	11300	8990	8900	8850	7960	9890	8900	12300	9540	11100
9	6000	10800	10600	8990	8740	8840	7540	9960	9820	9750	9180	3140
10	6000	11100	10500	8550	8760	9130	7540	9550	8960	9780	9940	2420
11	5970	11300	10600	9120	8740	8880	7970	9740	9000	10100	9660	2520
12	5920	11100	10000	8910	8720	8600	7520	9200	8830	8660	9710	5310
13	5930	11200	10200	9410	8740	8520	7580	7130	8580	8860	10000	6770
14	5490	11300	9720	9070	8770	8760	6700	8100	7830	8750	10100	8320
15	5340	11300	2900	8500	8710	7900	4960	7220	7800	9720	10100	8420
16	5320	11100	3830	8800	8770	8130	8080	8360	8060	9460	9640	8440
17	5810	11200	3480	8990	8670	8250	8500	10000	8220	9690	10200	9610
18	5720	10200	3820	9590	8900	8170	7910	9870	8390	9580	10300	9580
19	5580	10400	6380	8260	8810	7730	7460	9420	7290	5500	10100	9450
20	5720	11000	6370	7700	8920	7810	7590	9960	8520	4150	10400	9480
21	5530	10600	7390	7960	8580	7480	7360	10200	9220	9650	9620	2520
22	5780	8500	6870	9130	8720	8230	7320	10600	9130	9560	10100	2810
23	3020	11000	8000	9110	8680	8040	7860	10400	7190	7950	9620	---
24	3420	10000	8880	9280	8700	8180	8020	10000	6710	8180	9630	---
25	3690	10300	8990	9180	8440	8100	7960	10300	4180	8750	8650	---
26	3260	9800	8850	9360	8540	7860	7900	10100	2400	8210	8520	---
27	3480	10400	8940	9600	8590	7700	6420	10500	7700	7380	8560	9070
28	3440	10400	8670	8390	8560	7760	6520	10000	11700	8270	8610	9260
29	3390	10600	8590	8750	8500	7740	7130	9850	12900	8170	4870	9750
30	2450	10300	8840	9180	---	7740	6820	10000	14800	8920	5040	9630
31	1940	---	8510	8650	---	7720	---	10000	---	8320	5130	---
MONTH	4630	10120	8650	8860	8690	8320	7510	9270	8990	9660	9110	7160

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.5	13.0	---	7.0	---	11.5	12.5	20.5	24.0	28.5	29.5	27.5
2	23.0	14.0	4.0	6.0	---	7.0	15.0	20.5	25.0	28.0	29.5	24.0
3	20.5	13.5	5.5	4.5	---	7.0	14.5	21.0	26.5	27.0	29.5	22.0
4	21.0	13.0	4.0	1.0	---	7.0	12.5	19.5	27.0	24.5	28.5	---
5	22.5	13.0	5.0	0.5	---	9.0	16.0	20.0	27.5	---	29.5	---
6	22.5	11.0	5.0	0.5	---	10.5	20.5	19.5	28.0	---	29.5	---
7	22.0	9.5	5.5	0.5	---	13.0	20.0	17.0	28.5	---	29.0	---
8	19.5	9.0	5.5	---	---	10.5	15.5	16.0	27.5	---	28.0	---
9	17.0	11.5	4.5	---	---	11.0	15.5	17.5	26.5	---	26.5	---
10	19.0	11.0	5.5	---	---	14.0	19.5	19.0	26.5	29.0	27.5	---
11	19.0	12.5	5.5	---	---	17.5	24.0	20.0	25.5	26.5	28.5	---
12	20.5	13.5	6.0	6.0	---	18.0	24.5	21.5	26.0	26.0	28.5	---
13	19.5	15.0	5.0	---	---	15.5	24.0	22.0	26.0	28.5	29.5	---
14	20.5	16.5	7.5	---	8.5	15.5	24.0	20.5	25.0	29.0	29.0	---
15	21.0	17.0	7.0	1.5	8.0	15.5	15.5	23.0	---	27.5	29.5	---
16	21.0	16.5	7.0	---	9.0	14.5	17.5	24.5	---	27.0	29.5	28.5
17	22.0	16.5	6.0	---	9.5	15.0	20.0	26.5	---	27.5	29.5	28.5
18	22.0	12.0	6.0	---	8.0	15.5	22.0	27.0	---	26.0	30.0	29.0
19	20.5	9.0	7.0	---	8.0	16.0	23.5	26.0	---	27.5	30.5	28.5
20	17.5	9.5	5.5	---	10.0	15.5	21.5	26.0	29.0	28.5	31.0	24.0
21	17.0	10.0	5.0	---	12.0	17.5	17.5	26.0	25.5	29.0	30.0	---
22	16.0	7.5	5.0	---	6.0	17.0	20.0	26.0	24.5	29.5	26.5	---
23	17.0	5.5	6.5	---	9.0	15.5	20.0	25.5	23.0	30.0	27.5	---
24	17.5	7.0	8.0	---	11.5	12.0	18.0	25.5	28.5	31.0	26.0	---
25	18.0	7.5	10.0	---	11.0	13.0	14.5	26.5	30.5	31.5	26.0	---
26	18.0	9.0	11.5	---	9.0	15.5	12.5	26.0	30.0	31.0	27.5	---
27	17.0	8.5	---	---	11.0	16.0	15.0	25.0	31.0	31.5	27.5	24.5
28	18.5	8.0	---	---	13.0	11.0	18.5	26.0	30.5	30.5	26.0	23.5
29	16.5	---	---	---	13.5	11.0	18.5	24.0	30.0	29.0	24.0	18.0
30	13.5	---	---	---	---	12.5	20.0	22.0	30.5	29.5	22.5	16.0
31	12.0	---	8.0	---	---	12.0	---	23.0	---	30.5	24.5	---
MONTH	19.0	11.5	6.0	---	---	13.5	18.5	22.5	27.5	28.5	28.0	---

07151000 SALT FORK ARKANSAS RIVER AT TONKAWA, OKLA.--Continued

DISSOLVED SULFATE (SO_4), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93	79	440	380	370	370	320	370	420	---	350	95
2	130	140	450	380	350	370	320	230	430	530	390	100
3	180	370	450	350	350	370	330	220	440	530	390	280
4	200	400	440	340	350	370	330	370	440	520	390	280
5	210	440	440	370	360	360	330	400	440	490	400	340
6	240	430	440	390	370	360	320	400	440	520	390	470
7	250	520	440	340	370	370	330	380	430	500	400	470
8	250	510	460	370	370	370	330	410	370	500	390	460
9	260	480	440	370	360	370	320	410	400	400	380	140
10	260	460	430	360	360	380	320	390	370	400	410	120
11	250	460	440	380	360	370	330	400	370	420	400	120
12	250	460	410	370	360	360	310	380	370	360	400	230
13	250	460	420	390	360	350	320	300	360	370	410	290
14	240	460	400	380	360	360	280	340	330	360	420	350
15	230	460	130	350	360	330	210	300	330	400	420	350
16	230	460	170	360	360	340	340	350	340	390	400	350
17	250	460	160	370	360	340	350	410	340	400	420	400
18	240	420	170	400	370	340	330	410	350	400	420	400
19	240	430	270	340	370	320	310	390	310	240	420	390
20	240	450	270	320	370	330	320	410	350	180	430	390
21	240	440	310	330	360	310	310	420	380	400	400	120
22	250	350	290	380	360	340	310	440	380	390	420	130
23	140	450	330	380	360	340	330	430	300	330	400	---
24	150	410	370	380	360	340	330	410	280	340	400	---
25	170	420	370	380	350	390	330	420	180	360	360	---
26	150	400	370	390	350	330	330	420	110	340	350	---
27	160	430	370	400	360	320	270	430	320	310	360	380
28	160	430	360	350	360	320	280	410	480	340	360	380
29	150	440	360	360	350	320	300	410	530	340	210	400
30	120	420	370	380	---	320	290	410	---	370	220	400
31	96	---	350	360	---	320	---	410	---	350	220	---
MONTH	200	420	360	370	360	350	310	380	360	390	380	300

DISSOLVED SULFATE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	631	415	207	208	119	46	119	93	---	225	84
2	22	574	382	198	159	115	46	100	76	581	214	140
3	27	880	376	147	133	128	43	170	63	673	183	210
4	27	655	353	111	123	105	44	233	55	1420	170	137
5	24	582	378	80	146	97	44	216	47	1100	163	144
6	26	533	389	104	149	103	44	183	41	1070	122	207
7	25	565	361	118	129	98	41	156	37	1020	110	228
8	24	510	371	201	109	111	42	168	28	1020	106	443
9	23	415	332	211	117	121	42	147	28	769	85	510
10	23	411	319	160	126	93	44	125	26	712	81	369
11	22	394	323	151	117	90	40	115	25	683	75	343
12	22	367	307	129	112	104	36	103	24	539	65	397
13	20	342	300	115	141	97	38	94	23	492	60	244
14	19	322	320	91	172	102	34	337	23	415	57	206
15	19	317	674	62	154	81	39	446	22	380	54	179
16	18	287	1050	108	166	78	55	422	22	340	46	148
17	19	271	443	131	151	78	53	384	21	288	44	147
18	22	222	283	195	161	80	42	326	20	240	42	137
19	23	236	314	188	159	76	41	269	21	234	40	124
20	22	322	239	147	149	75	38	247	24	281	42	114
21	20	369	231	125	135	73	38	224	25	813	37	55
22	23	364	186	139	134	85	36	210	23	891	38	180
23	18	489	201	137	133	69	37	180	20	751	36	---
24	20	440	201	153	113	66	57	158	20	738	39	---
25	18	506	201	151	116	66	56	145	57	720	37	---
26	16	485	186	146	115	58	45	128	107	567	33	---
27	19	491	194	118	113	49	42	121	255	430	33	105
28	18	484	196	75	109	49	38	107	383	433	33	94
29	31	430	187	98	117	60	40	95	532	364	19	84
30	545	425	194	133	---	51	62	101	---	326	28	78
31	1040	---	181	184	---	44	---	103	---	267	51	---
MONTH	71	444	325	139	137	84	43	191	74	619	76	196

07151000 SALT FORK ARKANSAS RIVER AT TONKAWA, OKLA.--Continued

DISSOLVED CHLORIDE (CL), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	430	350	3500	2900	2800	2800	2400	2800	3300	---	2600	450
2	660	750	3500	2900	2600	2800	2400	1500	3300	---	3000	500
3	1000	2800	3500	2600	2600	2800	2400	1400	3400	---	2900	2000
4	1300	3100	3500	2500	2600	2800	2400	2800	3400	---	2900	1900
5	1300	3400	3500	2800	2700	2700	2400	3100	3400	---	3100	2600
6	1600	3400	3500	2900	2800	2700	2400	3100	3400	---	3000	3700
7	1600	---	3400	2500	2800	2800	2400	2900	3400	---	3100	3700
8	1600	---	3700	2800	2800	2800	2400	3100	2800	---	3000	3600
9	1700	3500	3400	2800	2700	2800	2300	3200	3100	3100	2900	750
10	1700	3600	3400	2700	2700	2900	2300	3000	2800	3100	3200	570
11	1700	3700	3400	2900	2700	2800	2400	3100	2800	3200	3100	600
12	1700	3600	3200	2800	2700	2700	2300	2900	2800	2700	3100	1500
13	1700	3600	3300	3000	2700	2600	2300	2100	2700	2800	3200	2000
14	1500	3700	3100	2800	2700	2700	2000	2500	2400	2700	3200	2600
15	1500	3700	690	2600	2700	2400	1400	2200	2400	3100	3200	2600
16	1500	3600	950	2800	2700	2500	2500	2600	2500	3000	3100	2600
17	1700	3600	840	2800	2700	2600	2600	3200	2500	3100	3300	3000
18	1600	3300	940	3000	2800	2500	2400	3100	2600	3000	3300	3000
19	1600	3300	1900	2600	2800	2400	2300	3000	2200	1600	3200	3000
20	1600	3500	1900	2400	2800	2400	2300	3200	2600	1100	3300	3000
21	1600	3400	2200	2400	2700	2300	2200	3300	2900	3100	3000	600
22	1700	2600	2000	2900	2700	2500	2200	3400	2900	3000	3200	670
23	720	3500	2500	2900	2700	2500	2400	3300	2200	2400	3000	---
24	820	3200	2800	2900	2700	2500	2500	3200	2000	2500	3100	---
25	900	3300	2800	2900	2600	2500	2400	3300	1100	2700	2700	---
26	780	3100	2800	3000	2700	2400	2400	3200	570	2500	2600	---
27	840	3300	2800	3000	2700	2400	1900	3400	2400	2200	2700	2800
28	830	3300	2700	2600	2700	2400	1900	3200	---	2600	2700	2900
29	820	3400	2700	2700	2600	2400	2100	3100	---	2500	1300	3100
30	580	3300	2800	2900	---	2400	2000	3200	---	2800	1400	3100
31	450	---	2600	2700	---	2400	---	3200	---	2600	1400	---
MONTH	1300	3200	2700	2800	2700	2600	2300	2900	2700	---	2900	2200

DISSOLVED CHLORIDE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	2750	3260	1570	1570	897	334	903	720	---	1680	397
2	111	3020	3010	1510	1190	870	334	658	594	---	1640	676
3	155	6660	2960	1100	993	972	315	1080	496	---	1400	1480
4	167	5050	2770	823	922	792	321	1760	432	---	1300	957
5	151	4560	2970	603	1100	732	323	1660	368	---	1250	1070
6	172	4160	3050	796	1130	778	324	1410	322	---	934	1640
7	169	---	2830	871	974	740	303	1190	291	---	846	1810
8	160	---	2930	1520	827	837	310	1300	211	---	815	3490
9	159	3260	2600	1600	884	911	303	1140	219	5920	647	2680
10	154	3240	2490	1200	953	705	322	963	197	5490	624	1840
11	149	3120	2530	1150	884	683	297	885	191	5300	579	1730
12	147	2890	2370	979	845	781	259	782	179	4050	499	2580
13	138	2700	2330	882	1060	729	280	677	173	3720	464	1720
14	125	2550	2460	692	1290	768	236	2490	168	3130	444	1540
15	121	2510	3500	463	1160	595	245	3210	161	2920	418	1340
16	116	2260	5820	817	1250	575	410	3150	161	2610	355	1100
17	130	2140	2370	989	1140	578	399	2980	158	2220	343	1130
18	150	1720	1570	1500	1220	592	308	2520	147	1840	329	1050
19	149	1840	2180	1400	1200	555	299	2060	155	1550	313	951
20	150	2540	1650	1070	1120	549	274	1910	179	1640	324	874
21	135	2890	1670	924	1010	533	277	1740	188	6250	288	279
22	152	2720	1320	1050	1010	632	263	1640	178	6840	296	926
23	94	3850	1480	1040	1000	508	273	1400	146	5540	280	---
24	107	3410	1520	1170	850	491	420	1220	140	5470	297	---
25	97	3940	1520	1150	870	485	409	1130	333	5430	277	---
26	82	3740	1400	1120	860	423	334	992	530	4210	250	---
27	102	3830	1470	903	845	362	295	945	1870	3110	244	800
28	98	3780	1470	562	820	359	265	826	---	3220	246	717
29	167	3360	1400	738	877	441	284	735	---	2700	121	643
30	2730	3310	1460	1010	---	377	439	783	---	2470	176	601
31	4900	---	1360	1380	---	318	---	800	---	1990	329	---
MONTH	372	3280	2310	1050	1030	631	315	1450	330	---	581	1310

07151000 SALT FORK ARKANSAS RIVER AT TONKAWA, OKLA.--Continued

DISSOLVED SOLIDS, IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1090	887	6570	5450	5280	5300	4600	5340	6250	---	4950	1130
2	1630	1830	6640	5500	4990	5360	4600	3200	6310	7940	5640	1250
3	2410	5380	6700	5060	5050	5340	4610	2940	6440	---	5620	3910
4	2760	5890	6570	4900	5050	5350	4610	5310	6440	7870	5620	3870
5	2770	6510	6570	5340	5210	5200	4630	5860	6440	7290	5930	4930
6	3290	6380	6570	5630	5330	5210	4560	5860	6440	7810	5640	7030
7	3380	7810	6510	4790	5320	5360	4710	5560	6380	7480	5900	7030
8	3380	7740	6900	5400	5340	5300	4730	5980	5340	7550	5750	6770
9	3520	6570	6440	5400	5230	5300	4450	6030	5930	5890	5520	1840
10	3520	6770	6380	5110	5250	5490	4450	5760	5380	5910	6010	1420
11	3510	6900	6440	5480	5230	5320	4730	5880	5400	6120	5830	1480
12	3480	6770	6050	5340	5220	5140	4440	5530	5290	5180	5860	3120
13	3480	6830	6180	5670	5230	5090	4480	4190	5130	5310	6050	3980
14	3220	6900	5870	5450	5250	5250	3940	4820	4640	5240	6120	4960
15	3140	6900	1700	5080	5210	4690	2910	4250	4620	5870	6120	5020
16	3130	6770	2250	5270	5250	4840	4800	4990	4790	5700	5820	5040
17	3410	6830	2040	5400	5190	4910	5080	6050	4900	5850	6180	5800
18	3360	6180	2240	5780	5340	4860	4690	5970	5010	5780	6250	5780
19	3280	6310	3750	4920	5280	4580	4400	5670	4290	3230	6120	5690
20	3360	6700	3740	4560	5350	4630	4490	6030	5090	2440	6310	5710
21	3250	6440	4360	4730	5130	4410	4340	6180	5540	5820	5800	1480
22	3400	5080	4040	5490	5220	4900	4310	6440	5490	5770	6120	1650
23	1770	6700	4750	5470	5190	4780	4660	6310	4230	4720	5800	---
24	2010	6050	5320	5580	5210	4870	4770	6050	3940	4870	5810	---
25	2170	6250	5400	5520	5040	4820	4730	6250	2460	5240	5170	---
26	1910	5920	5300	5640	5100	4660	4690	6120	1410	4890	5090	---
27	2040	6310	5360	5790	5140	4560	3770	6380	4560	4350	5120	5450
28	2020	6310	5190	5010	5120	4600	3830	6050	7160	4930	5150	5570
29	1990	6440	5140	5240	5080	4580	4190	5950	7940	4860	2860	5890
30	1440	6250	5300	5520	---	4580	4010	6050	---	5350	2960	5810
31	1140	---	5080	5170	---	4570	---	6050	---	4960	3010	---
MONTH	2720	6150	5200	5310	5200	4960	4440	5580	5280	5660	5490	4290

DISSOLVED SOLIDS (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	209	7060	6160	3000	3010	1720	646	1730	1370	---	3230	999
2	273	7400	5680	2880	2290	1670	646	1370	1120	8780	3120	1690
3	358	12760	5590	2120	1910	1860	610	2310	939	---	2670	2930
4	365	9600	5230	1590	1770	1520	622	3370	817	21460	2470	1900
5	329	8620	5610	1150	2110	1400	625	3170	696	16480	2380	2060
6	355	7880	5770	1520	2160	1490	628	2680	609	16100	1780	3090
7	347	8530	5360	1680	1870	1420	585	2270	551	15310	1610	3410
8	328	7690	5530	2910	1590	1600	600	2470	403	15420	1550	6590
9	324	6160	4920	3060	1700	1750	589	2160	417	11270	1240	6570
10	314	6120	4720	2300	1830	1350	625	1830	377	10450	1190	4570
11	303	5880	4780	2190	1700	1310	575	1680	365	10060	1100	4280
12	300	5460	4510	1880	1620	1500	504	1490	343	7780	950	5430
13	282	5090	4420	1680	2030	1400	544	1320	332	7130	882	3400
14	261	4800	4690	1320	2480	1470	468	4810	326	6000	842	2960
15	254	4730	8600	891	2220	1150	527	6260	312	5560	793	2580
16	245	4270	13850	1570	2400	1110	791	6060	310	4970	675	2120
17	267	4040	5800	1890	2180	1110	768	5650	304	4220	651	2140
18	308	3270	3740	2860	2330	1140	596	4780	284	3510	624	2000
19	310	3490	4360	2700	2290	1080	582	3920	301	3220	594	1810
20	308	4790	3310	2080	2150	1060	533	3630	344	3760	613	1670
21	281	5460	3260	1790	1940	1040	539	3300	359	11900	549	691
22	312	5240	2600	2010	1930	1220	512	3110	341	13030	561	2280
23	230	7270	2860	1990	1920	980	529	2660	285	10700	533	---
24	260	6470	2900	2230	1630	947	811	2320	277	10560	565	---
25	234	7470	2910	2190	1670	936	791	2140	762	10410	531	---
26	202	7110	2690	2130	1650	818	645	1880	1320	8120	481	---
27	248	7260	2810	1720	1620	701	591	1790	3620	6060	470	1530
28	240	7160	2830	1080	1570	695	527	1570	5740	6200	473	1370
29	409	6370	2690	1410	1690	854	554	1400	8030	5210	263	1220
30	6760	6270	2800	1940	---	730	865	1490	---	4720	376	1150
31	12340	---	2610	2650	---	617	---	1520	---	3830	700	---
MONTH	889	6460	4630	2010	1970	1210	614	2780	1080	9080	1110	2710

07152500 ARKANSAS RIVER AT RALSTON, OKLA.

LOCATION.--Lat 36°30'09", long 96°43'22", in NW1/4 sec.1, T.23 N., R.5 E., Osage County, at gaging station at bridge on State Highway 18 at Ralston, 2.0 mi (3.2 km) downstream from Salt Creek, 2.0 mi (3.2 km) upstream from Grayhorse Creek, and at mile 594.0 (955.7 km).

DRAINAGE AREA.--54,465 sq mi (141,064.4 km²), of which 7,615 sq mi (19,722.8 km²) is probably noncontributing.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	PHOSPHATE (PO4) (MG/L)
OCT.								
05...	2800	76	182	0	38	110	5.9	.85
15...	1200	220	204	0	100	340	3.4	1.2
25...	1580	180	140	16	82	280	.40	.29
NOV.								
05...	8410	140	168	0	66	210	11	1.2
15...	2070	480	162	0	130	730	6.2	1.1
25...	7150	140	180	0	56	200	9.2	.84
DEC.								
05...	3300	390	180	0	180	560	4.5	.57
15...	8680	37	156	0	30	54	6.8	.70
25...	2900	290	208	0	120	440	8.8	1.1
JAN.								
05...	2280	330	70	4	150	500	--	--
15...	1280	390	276	0	190	570	8.9	1.0
25...	1950	350	252	0	180	500	8.4	1.4
FEB.								
05...	1090	440	272	0	200	660	7.9	1.4
15...	1420	360	256	0	190	520	6.9	1.3
25...	1380	390	254	0	220	550	5.7	1.1
MAR.								
05...	1100	430	256	0	250	610	6.6	1.2
15...	972	430	176	0	240	620	6.3	.76
25...	1010	370	212	0	240	560	6.3	1.1
APR.								
05...	908	360	224	0	250	520	1.0	1.0
15...	808	350	226	0	220	520	3.1	1.5
25...	1650	290	246	0	190	460	.90	1.4
MAY								
05...	9900	78	210	0	77	120	.20	.88
15...	2080	210	200	0	120	320	4.0	1.1
25...	1390	480	210	0	180	720	3.6	.98
JUNE								
05...	2680	120	152	0	58	180	9.3	1.8
15...	997	340	218	0	160	500	3.1	1.8
25...	1630	190	184	0	95	280	7.8	2.4
JULY								
05...	1880	790	184	0	220	1200	1.9	.98
15...	2050	640	184	0	220	950	4.6	1.6
25...	2420	520	158	0	160	800	4.2	1.3
AUG.								
05...	1510	450	176	0	170	680	4.6	1.3
15...	620	470	188	0	190	720	5.7	1.2
25...	523	400	186	0	160	620	3.7	1.3
SEP.								
05...	2220	200	194	0	98	290	3.2	2.6
15...	2130	210	142	0	86	300	5.2	1.2
25...	1870	270	166	0	120	400	4.2	1.6

CHEMICAL ANALYSES OF ADDITIONAL SAMPLES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTANTANEOUS DISCHARGE (CFS)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND (MG/L)
OCT.			
28...	2020	39	4.8
NOV.			
15...	2110	23	.5
DEC.			
13...	2670	14	2.2
JAN.			
11...	1900	14	1.4
FEB.			
08...	1700	12	3.0
MAR.			
21...	1040	40	11
APR.			
12...	778	28	2.2
MAY			
03...	3540	56	8.6
JUNE			
13...	1080	36	11
JULY			
05...	1810	48	6.6
AUG.			
15...	616	52	16
SEP.			
27...	1200	46	7.8

07152500 ARKANSAS RIVER AT RALSTON, OKLA.

PERIOD OF RECORD.--Chemical analyses: January 1950 to September 1963, May 1965 to current year.
Water temperatures: January 1950 to September 1963, May 1965 to current year.

REMARKS.--Continuous monitor records for water temperature and specific conductance are collected for this station.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.								
05...	428	.58	3240	180	31	2.5	720	7.4
15...	948	1.29	3070	280	110	5.7	1570	7.6
25...	752	1.02	3210	240	98	5.1	1280	9.0
NOV.								
05...	606	.82	13800	190	72	4.6	1050	7.4
15...	1610	2.19	9000	260	130	13	2740	7.8
25...	575	.78	11100	150	35	5.0	1000	8.3
DEC.								
05...	144	.20	1280	300	150	9.8	2420	8.1
15...	298	.41	6980	160	32	1.3	506	8.3
25...	1170	1.59	9160	300	130	7.3	1930	8.0
JAN.								
05...	1190	1.62	7330	210	146	9.9	2040	8.7
15...	1580	2.15	5460	420	194	8.3	2560	8.2
25...	1410	1.92	7420	380	173	7.8	2290	8.1
FEB.								
05...	1710	2.33	5030	440	217	9.1	2840	8.0
15...	1410	1.92	5410	400	190	7.8	2340	8.1
25...	1530	2.08	5700	420	212	8.3	2500	8.2
MAR.								
05...	1570	2.14	4660	430	220	9.0	2690	8.0
15...	1540	2.09	4040	360	220	9.9	2590	7.4
25...	1450	1.97	3950	410	240	8.0	2410	7.7
APR.								
05...	1470	2.00	3600	400	220	7.8	2380	7.2
15...	1420	1.93	3100	390	210	7.7	2340	7.2
25...	1320	1.80	5080	400	200	6.3	2070	7.3
MAY								
05...	494	.67	13200	240	68	2.2	813	7.7
15...	868	1.18	4880	280	120	5.5	1510	7.9
25...	1640	2.23	6160	350	180	11	2820	7.8
JUNE								
05...	536	.73	3880	180	55	3.9	913	8.3
15...	1270	1.73	3420	340	160	8.0	2210	7.9
25...	776	1.06	3420	240	89	5.3	1340	7.6
JULY								
05...	2550	3.47	12900	350	200	18	4320	7.9
15...	2160	2.94	12000	360	210	15	3650	7.6
25...	1740	2.37	11400	290	160	13	2980	8.2
AUG.								
05...	1520	2.07	6200	310	170	11	2650	7.0
15...	1600	2.18	2680	380	230	10	2790	7.2
25...	1380	1.88	1950	310	160	9.9	2440	6.9
SEP.								
05...	840	1.14	5040	240	81	5.6	1430	7.2
15...	822	1.12	4730	190	74	6.6	1410	7.5
25...	1030	1.40	5200	250	110	7.4	1790	7.1

FIELD ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION
OCT.				
28...	1350	18.0	8.6	93
NOV.				
15...	2200	18.0	8.8	98
DEC.				
13...	2800	6.0	9.2	77
JAN.				
11...	2000	3.5	13.0	104
FEB.				
08...	2580	4.5	13.4	109
MAR.				
21...	2400	13.0	10.4	104
APR.				
12...	2300	22.0	7.3	89
MAY				
03...	985	16.0	6.4	68
JUNE				
13...	2200	27.0	8.9	119
JULY				
05...	4700	26.5	12.8	164
AUG.				
15...	3800	32.0	12.7	179
SEP.				
27...	1550	25.5	9.5	120

07152500 ARKANSAS RIVER AT RALSTON, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1130	828	2270	2180	2380	2590	2400	1410	2260	3820	3170	2010
2	1220	460	2370	1860	2360	2640	2440	1660	2170	4490	2960	1690
3	1340	663	2400	2020	2660	2750	2420	1540	1220	5310	2960	1910
4	1150	861	2460	2270	2850	2710	2400	1290	846	4310	2960	1620
5	703	1030	2510	2040	2880	2770	2370	793	921	4200	2650	1310
6	932	993	2530	2160	2850	2810	2480	805	1080	4350	2800	1020
7	1320	1090	2560	2040	2650	2640	2380	953	1310	2260	2870	1090
8	1360	1350	2880	2220	2630	2620	2380	1090	1460	3130	2890	1060
9	1460	1600	2780	2040	2760	2760	2500	1150	1710	3800	2890	955
10	1530	1710	2830	2160	2650	2590	2400	1320	1890	4200	2800	677
11	1590	1850	2890	2490	2590	2600	2390	1110	2030	4060	2840	898
12	1510	2160	2900	2550	2680	2710	2490	1160	2140	4050	2850	754
13	1570	2860	2900	2430	2520	2640	2500	1300	2180	3750	2830	1060
14	1640	2710	2660	2530	2360	2850	2520	1480	2400	3750	2810	1290
15	1560	2900	2670	2570	2370	2770	2320	1550	2410	3200	2790	1420
16	1560	2760	819	2610	2470	2670	2370	1690	2270	2050	2750	1900
17	1560	2740	801	2280	2650	2680	2260	1870	2320	2310	2770	1910
18	1520	2690	880	2450	2590	2550	2380	1980	2390	2000	2800	2270
19	1520	2800	1140	2460	2410	2660	2310	2190	2390	1560	2810	2160
20	1320	2870	1250	2180	2430	2560	2120	2000	1870	1550	2780	2250
21	853	2770	1330	2500	2300	2520	1690	2330	1720	584	2740	2030
22	1010	1690	1600	2650	2460	2490	2060	2640	1920	836	2550	2200
23	1260	1440	1760	2520	2480	2640	1810	2510	1970	1080	2680	2270
24	1230	1420	1880	2470	2490	2520	1830	2920	1420	1920	2450	3130
25	1290	1020	2190	2310	2460	2600	2000	2910	1270	2980	2200	1740
26	1460	1040	2110	2320	2550	2560	1640	2850	1360	3520	2390	1700
27	1270	1500	2080	2400	2510	2310	1710	2890	1460	3650	2480	1620
28	1450	1890	2260	2490	2580	3220	1780	2730	1840	3390	2700	1780
29	1470	2170	2220	2620	2600	2480	1830	2750	1960	2650	2630	2020
30	1320	2210	2650	2560	---	2400	1830	2730	2660	2920	2400	1730
31	1390	---	2460	2610	---	2400	---	2570	---	3330	2470	---
MONTH	1340	1800	2160	2350	2560	2640	2200	1880	1830	3060	2730	1650

TEMPERATURE (°C) OF WATER, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.0	15.0	4.5	7.5	1.0	7.0	---	18.0	21.5	28.0	---	24.0
2	24.0	14.0	4.5	6.0	1.0	5.5	---	17.5	22.0	26.5	---	21.0
3	23.0	13.0	4.5	4.5	---	6.0	---	18.5	24.5	25.5	---	18.5
4	21.5	12.0	4.5	0.5	---	6.0	13.5	17.5	25.5	---	---	20.0
5	21.5	12.0	5.5	---	---	7.5	14.0	18.0	26.0	---	---	20.0
6	21.5	11.0	5.5	3.0	---	10.0	19.0	18.0	26.0	23.0	---	22.5
7	21.5	9.5	5.5	5.5	---	12.0	17.5	16.0	26.0	24.0	---	25.5
8	20.0	8.5	6.5	5.5	---	9.5	13.0	14.0	26.5	23.0	---	24.0
9	17.5	8.5	6.5	---	3.5	10.5	13.5	17.0	24.5	25.0	---	23.0
10	17.0	9.5	6.5	---	4.5	13.5	18.0	17.0	25.0	26.0	---	26.0
11	18.0	11.0	6.0	6.5	2.5	17.0	22.5	18.0	26.0	27.5	---	26.0
12	19.5	12.0	6.5	5.5	---	17.5	23.0	19.0	26.5	23.5	---	26.0
13	19.5	14.0	6.0	2.5	---	16.0	22.5	19.5	25.5	24.0	---	25.0
14	19.0	15.5	8.0	5.5	7.0	14.0	23.0	18.5	26.0	27.5	---	---
15	21.0	16.5	8.0	7.5	---	15.5	15.0	20.0	26.5	27.5	---	---
16	22.0	16.5	7.5	7.0	---	14.5	17.5	22.5	26.5	27.0	---	---
17	21.5	16.0	6.5	5.5	---	12.5	19.0	24.5	26.5	26.5	---	---
18	21.5	12.5	6.0	6.0	---	15.0	20.0	24.5	26.0	25.5	---	---
19	20.5	9.5	6.5	6.5	---	15.0	21.5	23.5	26.5	25.5	---	---
20	18.5	10.0	6.0	6.5	---	15.0	20.5	23.5	26.5	26.0	---	---
21	17.5	10.0	5.5	3.5	---	14.0	16.5	24.0	25.0	26.0	---	---
22	17.0	7.5	5.5	3.0	---	15.0	17.5	24.0	24.0	---	---	---
23	17.0	6.5	7.0	---	8.0	13.5	17.0	22.0	22.5	---	26.5	---
24	18.0	6.5	8.5	---	10.5	10.5	10.5	22.0	26.0	---	24.5	---
25	18.5	7.0	11.0	---	10.5	12.0	13.5	25.0	29.0	---	23.0	---
26	18.5	8.0	12.5	---	8.5	14.0	11.5	24.5	29.0	---	24.0	---
27	17.0	7.5	11.0	1.5	10.0	14.0	13.5	24.0	29.5	---	25.5	---
28	17.5	7.5	7.0	0.5	12.5	9.0	16.0	---	30.0	---	22.5	23.5
29	19.0	6.0	9.5	0.5	15.0	---	16.5	22.5	28.0	---	22.5	18.5
30	17.5	5.0	9.0	0.5	---	---	19.0	21.0	29.0	---	21.5	16.0
31	15.0	---	8.0	2.5	---	---	---	21.0	---	---	21.0	---
MONTH	19.5	10.5	7.0	---	---	12.0	17.0	20.5	26.0	---	---	---

07152500 ARKANSAS RIVER AT RALSTON, OKLA.--Continued

DISSOLVED SULFATE (SO_4), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	61	170	160	190	260	190	100	170	720	480	150
2	89	33	180	140	180	280	210	120	160	960	400	120
3	98	48	190	150	290	320	200	110	89	1300	400	140
4	86	63	210	170	360	310	190	94	62	900	400	120
5	51	75	230	150	370	330	180	58	67	860	280	96
6	68	73	240	160	360	340	220	59	79	910	340	75
7	97	88	250	150	280	280	190	70	96	170	370	80
8	100	99	370	160	280	270	190	80	110	460	370	78
9	110	120	330	150	330	330	230	84	130	710	370	70
10	110	130	350	160	280	260	190	97	140	860	340	69
11	120	140	370	230	260	270	190	81	150	800	350	66
12	110	160	380	250	300	310	230	85	160	820	360	55
13	120	360	380	200	240	280	230	95	160	690	350	78
14	120	310	290	240	180	360	240	110	190	690	340	94
15	110	380	290	260	180	330	170	110	200	490	340	100
16	110	330	60	270	220	290	180	120	170	150	320	140
17	110	320	59	170	280	300	170	140	170	170	330	140
18	110	300	64	210	260	250	190	150	190	150	340	170
19	110	340	83	210	200	290	170	160	190	110	340	160
20	97	370	92	160	200	250	160	150	140	110	330	170
21	62	330	97	230	170	240	120	170	130	43	320	150
22	74	120	120	280	210	230	150	280	140	61	250	160
23	92	110	130	240	220	280	130	230	140	79	300	170
24	90	100	140	220	230	240	130	300	100	140	210	460
25	94	75	160	170	210	270	150	380	93	410	160	130
26	110	76	160	170	250	250	120	360	100	610	190	130
27	93	110	150	190	230	170	130	370	110	650	220	120
28	110	140	170	230	260	490	130	310	140	560	300	130
29	110	160	160	270	270	220	130	320	140	280	280	150
30	97	160	280	250	---	190	130	310	290	380	190	130
31	100	---	210	270	---	190	---	260	---	540	220	---
MONTH	98	170	210	200	250	280	170	180	140	510	320	130

DISSOLVED SULFATE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	342	1620	1680	1210	948	857	497	633	595	2450	1820	309
2	340	1070	1810	931	719	909	525	1050	812	3900	1500	378
3	355	1240	1850	840	933	1050	496	1080	716	5630	1390	495
4	489	1280	1970	854	870	943	481	1490	536	4640	1400	580
5	339	1840	2070	646	897	976	444	1440	469	4270	1110	580
6	296	1720	2060	556	966	1000	536	964	444	5600	1170	457
7	371	1410	2090	565	1240	755	433	945	461	1500	1120	482
8	350	1440	2970	879	1270	730	418	840	456	3310	1050	521
9	364	1280	2590	929	1490	896	515	752	477	4550	952	682
10	372	1040	2660	945	1190	707	424	895	486	5260	809	655
11	377	978	2780	1330	1020	732	496	790	482	6710	789	702
12	370	1040	2720	1470	1200	825	473	663	479	4880	741	566
13	373	2210	2710	1150	970	736	464	640	471	3960	667	670
14	389	1750	2100	1230	709	939	467	647	540	3670	612	685
15	370	2100	7320	757	690	859	371	653	527	3040	562	581
16	373	1850	2960	1090	918	756	400	923	429	1060	692	692
17	380	1720	2610	948	1230	755	366	1030	416	1220	671	647
18	391	1490	1960	1190	1220	624	487	960	469	962	445	762
19	415	1620	1700	1330	958	736	359	989	524	1130	417	659
20	420	1760	1360	1040	1010	639	588	956	403	1290	385	642
21	402	2370	1170	1390	806	651	458	891	385	806	333	563
22	379	1190	1230	1690	926	627	567	1300	605	599	279	575
23	448	956	1220	1340	904	784	555	987	546	615	351	562
24	399	1450	1170	1180	870	628	565	1530	624	992	254	1800
25	483	1320	1260	869	799	732	637	1420	614	2620	237	609
26	450	1180	1130	827	889	692	535	1250	463	3560	260	478
27	487	1400	1040	779	811	455	501	1240	407	3470	292	394
28	585	1600	1080	852	893	1330	476	1000	484	2710	345	409
29	590	1740	1020	885	905	605	496	1010	497	1300	378	506
30	472	1700	1930	1020	---	517	543	1000	987	1670	383	483
31	599	---	1460	1280	---	506	---	860	---	2180	488	---
MONTH	408	1510	2050	1030	974	771	480	996	508	2820	692	600

07152500 ARKANSAS RIVER AT RALSTON, OKLA.--Continued

DISSOLVED CHLORIDE (CL), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	240	160	520	500	550	630	590	310	520	1200	880	460
2	260	72	550	420	540	650	560	370	500	1500	790	380
3	290	120	550	460	660	700	560	340	260	1800	790	430
4	240	170	570	520	740	680	550	280	170	1400	790	360
5	130	210	590	460	750	700	550	160	190	1300	650	280
6	190	200	600	490	740	720	580	160	230	1400	720	210
7	290	230	610	460	650	650	550	200	280	520	750	230
8	300	290	750	510	640	640	550	230	320	860	760	220
9	320	360	710	460	700	700	590	240	380	1200	760	200
10	340	380	730	490	650	630	550	290	430	1300	720	130
11	350	420	760	580	630	630	550	230	460	1300	740	180
12	330	490	760	610	670	680	580	250	490	1300	740	150
13	350	740	760	560	590	650	590	280	500	1100	730	220
14	370	680	660	600	540	740	590	330	550	1100	720	280
15	350	760	660	620	550	700	530	340	560	890	710	310
16	350	700	160	630	570	660	550	380	520	470	700	430
17	350	690	160	520	650	670	520	420	530	530	700	430
18	340	670	180	570	630	610	550	450	550	450	720	520
19	340	720	240	570	560	660	530	500	550	350	720	490
20	290	750	270	500	560	610	480	450	420	340	710	520
21	170	700	290	590	530	590	380	560	390	100	690	460
22	210	380	360	650	570	580	470	650	430	170	610	500
23	270	320	400	590	580	650	410	590	450	230	670	520
24	260	310	420	570	580	590	410	770	310	430	570	860
25	280	210	500	530	570	630	450	770	270	800	500	390
26	320	220	480	530	610	610	370	740	300	1000	550	380
27	270	330	470	550	590	530	380	760	320	1100	580	360
28	320	430	520	580	620	900	400	690	410	980	670	400
29	320	500	510	640	630	580	410	700	440	650	640	460
30	290	510	650	610	---	550	410	690	660	770	550	390
31	300	---	570	630	---	550	---	620	---	950	570	---
MONTH	290	420	510	550	620	650	510	440	410	890	690	370

DISSOLVED CHLORIDE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	985	4370	5250	3770	2810	2040	1430	1890	1860	3990	3370	958
2	993	2310	5440	2060	2200	2100	1430	3180	2530	5910	2960	1150
3	1050	3140	5320	2600	2120	2270	1390	3250	2090	8100	2740	1530
4	1010	3510	5210	2670	1800	2090	1380	4400	1460	7150	2760	1760
5	877	5200	5240	2000	1830	2090	1340	3840	1300	6650	2550	1710
6	823	4840	5140	1730	2000	2100	1400	2590	1270	8600	2480	1290
7	1090	4050	5090	1750	2050	1740	1280	2640	1360	4830	2300	1380
8	1040	4260	6050	2750	2950	1710	1240	2410	1370	6190	2120	1090
9	1090	3870	5530	2880	3210	1930	1320	2180	1450	7430	1930	1680
10	1120	3170	5540	2950	2730	1680	1220	2640	1500	8200	1710	1670
11	1140	3010	5640	3420	2430	1730	1180	2270	1500	7440	1640	1930
12	1110	3250	5510	3610	2710	1820	1220	1920	1490	7720	1530	1490
13	1130	4540	5490	3180	2440	1700	1190	1890	1470	6520	1390	1910
14	1180	3880	4780	3070	2170	1940	1170	1940	1550	6030	1290	1900
15	1120	4250	14560	1830	2080	1840	1160	1970	1500	5570	1190	1730
16	1130	3990	7970	2570	2410	1710	1200	2810	1340	3220	1070	2130
17	1150	3750	6990	2970	2810	1700	1140	3170	1300	3810	1010	1990
18	1180	3340	5380	3210	2900	1530	1210	2970	1370	2920	939	2320
19	1250	3430	4900	3530	2720	1680	1130	3080	1530	3400	877	2050
20	1240	3590	3990	3230	2780	1560	1630	2950	1240	3880	821	2010
21	1100	5080	3450	3540	2530	1640	1400	2790	1170	1950	726	1740
22	1070	3640	3730	3870	2450	1620	1760	2990	1370	1620	686	1790
23	1320	2850	3720	3370	2350	1720	1700	2500	1690	1760	789	1760
24	1170	4340	3600	3090	2240	1580	1730	3080	1270	3060	683	3370
25	1190	3740	3920	2720	2120	1730	1970	2850	1220	5190	738	1860
26	1350	3340	3510	2590	2180	1690	1630	2570	1370	6050	758	1460
27	1310	4200	3240	2240	2050	1420	1530	2510	1220	5800	760	1200
28	1750	4930	3370	2200	2140	2420	1460	2190	1490	4740	767	1250
29	1770	5410	3190	2070	2140	1970	1520	2200	1530	2970	878	1560
30	1400	5320	4630	2480	---	1490	1670	2190	2250	3350	1100	1470
31	1780	---	3860	2910	---	1450	---	2080	---	3870	1180	---
MONTH	1200	3950	5190	2830	2420	1780	1410	2640	1500	5090	1480	1720

07152500 ARKANSAS RIVER AT RALSTON, OKLA.--Continued

DISSOLVED SOLIDS, IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	684	501	1370	1320	1440	1570	1450	854	1370	2310	1920	1220
2	739	278	1430	1130	1430	1600	1480	1000	1310	2720	1790	1020
3	811	401	1450	1220	1610	1660	1460	932	739	3210	1790	1160
4	696	521	1490	1370	1730	1640	1450	781	512	2610	1790	981
5	426	624	1520	1230	1740	1680	1430	480	558	2540	1600	793
6	564	601	1530	1310	1730	1700	1500	487	654	2630	1700	617
7	799	660	1550	1230	1600	1600	1440	577	793	1370	1740	660
8	823	817	1740	1340	1590	1590	1440	660	884	1890	1750	642
9	884	969	1680	1230	1670	1670	1510	696	1040	2300	1750	578
10	926	1040	1710	1310	1600	1570	1450	799	1140	2540	1700	410
11	963	1120	1750	1510	1570	1570	1450	672	1230	2460	1720	544
12	914	1310	1760	1540	1620	1640	1510	702	1300	2450	1730	456
13	950	1730	1760	1470	1530	1600	1510	787	1320	2270	1710	642
14	993	1640	1610	1530	1430	1730	1530	896	1450	2270	1700	781
15	944	1760	1620	1560	1430	1680	1400	938	1460	1940	1690	860
16	944	1670	496	1580	1500	1620	1430	1020	1370	1240	1660	1150
17	944	1660	485	1380	1600	1620	1370	1130	1400	1400	1680	1160
18	920	1630	533	1480	1570	1540	1440	1200	1450	1210	1700	1370
19	920	1700	690	1490	1460	1610	1400	1330	1450	944	1700	1310
20	799	1740	757	1320	1470	1550	1280	1210	1130	938	1680	1360
21	516	1680	805	1510	1390	1530	1020	1410	1040	354	1660	1230
22	611	1020	969	1600	1490	1510	1250	1600	1160	506	1540	1330
23	763	872	1070	1530	1500	1600	1100	1520	1190	654	1620	1370
24	745	860	1140	1500	1510	1530	1110	1770	860	1160	1480	1890
25	781	617	1330	1400	1490	1570	1210	1760	769	1800	1330	1050
26	880	630	1280	1400	1540	1550	993	1730	823	2130	1450	1030
27	769	908	1260	1450	1520	1400	1040	1750	884	2210	1500	981
28	878	1140	1370	1510	1560	1950	1080	1650	1110	2050	1630	1080
29	890	1310	1340	1590	1570	1500	1110	1660	1190	1600	1590	1220
30	799	1340	1600	1550	---	1450	1110	1650	1610	1770	1450	1050
31	841	---	1490	1580	---	1450	---	1560	---	2020	1500	---
MONTH	810	1090	1310	1430	1550	1600	1330	1140	1110	1860	1650	998

DISSOLVED SOLIDS (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2830	13380	13840	9980	7390	5120	3760	5230	4910	7930	7360	2550
2	2810	8870	14290	7690	5790	5180	3740	8660	6700	11010	6720	3120
3	2930	10260	13960	6930	5220	5440	3640	8910	5920	14320	6240	4090
4	4040	10640	13670	7050	4190	5050	3630	12360	4440	13530	6290	4790
5	2820	15190	13500	5330	4240	4980	3520	11910	3880	12700	6280	4800
6	2450	14220	13150	4590	4660	4960	3630	7990	3670	16210	5860	3780
7	3060	11700	12890	4670	7020	4300	3380	7820	3810	12740	5350	3990
8	2890	11870	14030	7260	7310	4240	3260	6950	3770	13610	4910	4310
9	3010	10570	13130	7670	7670	4600	3400	6220	3940	14780	4470	4980
10	3080	8580	13000	7880	6710	4220	3200	7400	4020	15650	4040	5430
11	3120	8070	13040	8870	6100	4330	3110	6530	3980	14400	3830	5810
12	3060	8610	12700	9170	6610	4420	3170	5480	3950	14960	3570	4700
13	3080	10560	12660	8340	6260	4190	3070	5290	3880	13060	3260	5540
14	3220	9390	11740	7860	5710	4530	3010	5350	4080	12070	3040	5330
15	3060	9810	40540	4620	5460	4390	3060	5400	3930	12080	2830	4800
16	3090	9520	24500	6400	6300	4190	3160	7620	3540	8580	2550	5710
17	3140	9000	21600	7830	6930	4150	3020	8510	3440	10040	2400	5340
18	3230	8130	16250	8410	7280	3890	3170	7930	3600	7780	2220	6120
19	3430	8100	14030	9250	7130	4120	2960	8160	4020	9310	2070	5440
20	3470	8350	11260	8550	7310	3950	4850	7880	3330	10640	1950	5300
21	3330	12090	9650	9150	6650	4200	3780	7350	3180	6690	1740	4650
22	3140	9860	10170	9530	6430	4190	4680	7380	3670	4960	1740	4750
23	3710	7880	10040	8650	612[illegible]	4240	4590	6440	4510	5080	1930	4640
24	3300	12020	9650	8070	5820	4050	4670	7060	3500	8190	1790	7420
25	3330	10940	10380	7170	5550	4330	5260	6560	3430	11640	1950	5030
26	3720	9720	9310	6830	5540	4270	4420	6010	3820	12480	1990	3950
27	3690	11550	8600	5880	5290	3750	4140	5810	3360	11750	1980	3260
28	4830	13220	8900	5700	5400	5230	3930	5270	4000	9970	1860	3370
29	4880	14330	8420	5140	5350	4090	4100	5260	4100	7320	2180	4160
30	3910	14050	10910	6280	---	3910	4490	5270	5520	7680	2890	3990
31	4950	---	10130	7250	---	3810	---	5250	---	8220	3070	---
MONTH	3370	10680	13550	7350	6120	4400	3730	7070	4060	10950	3500	4710

07153150 KEYSTONE LAKE NEAR CLEVELAND, OKLA.

LOCATION.--Lat 36°14'30", long 96°21'40", in SW1/4SW1/4 sec.32, T.21 N., R.9 E., Pawnee County, 0.4 mi (0.6 km) upstream from Cowskin Creek, and 6.2 mi (10.0 km) southeast of Cleveland.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	RESER-VOIR STORAGE (AC-FT)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
OCT.								
20...	588400	100	110	0	52	160	.40	440
NOV.								
09...	648400	140	146	0	62	200	.70	555
DEC.								
01...	597400	--	--	--	--	--	--	--
21...	699300	200	130	0	79	300	1.7	744
JAN.								
07...	633000	180	152	0	88	260	.20	711
28...	556600	--	--	--	--	--	--	--
FEB.								
16...	542100	270	210	0	140	410	.20	1110
MAR.								
08...	554000	330	222	0	180	470	.20	1270
29...	544600	--	--	--	--	--	--	--
APR.								
19...	521100	360	224	0	220	520	1.6	1380
MAY								
10...	606700	210	190	0	130	300	.70	868
JUNE								
01...	578400	260	178	0	120	380	.10	994
22...	534100	--	--	--	--	--	--	--
JULY								
12...	571400	300	172	0	120	440	.30	1070
AUG.								
02...	528600	--	--	--	--	--	--	--
23...	492000	390	166	0	130	590	.20	1350
SEP.								
13...	523500	370	154	0	120	550	.20	1240

07153150 KEYSTONE LAKE NEAR CLEVELAND, OKLA.

PERIOD OF RECORD.--Chemical analyses: October 1966 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TUR-BID-ITY (MG/L)
OCT.							
20...	.60	160	70	3.4	790	8.0	40
NOV.							
09...	.75	180	60	4.5	995	7.5	25
DEC.							
01...	--	--	--	--	1260	--	--
21...	1.01	200	93	6.2	1310	7.9	15
JAN.							
07...	.97	210	85	5.4	1240	7.3	2
28...	--	--	--	--	1580	--	--
FEB.							
16...	1.51	320	150	6.6	1870	8.2	1
MAR.							
08...	1.73	340	160	7.8	2130	7.7	1
29...	--	--	--	--	2300	--	--
APR.							
19...	1.88	380	200	8.0	2330	8.0	25
MAY							
10...	1.18	280	120	5.5	1490	7.9	20
JUNE							
01...	1.35	270	120	6.9	1720	7.8	20
22...	--	--	--	--	1840	--	--
JULY							
12...	1.46	250	110	8.1	1880	7.3	4
AUG.							
02...	--	--	--	--	1980	--	--
23...	1.84	280	140	10	2380	7.5	6
SEP.							
13...	1.69	250	120	10	2230	7.2	15

07157950 CIMARRON RIVER NEAR BUFFALO, OKLA.

LOCATION.--Lat 36°55'28", long 99°23'56", in NW1/4SW1/4 sec.7, T.28 N., R.20 W., Harper County, at bridge on U.S. Highway 64, 7.0 mi (11.3 km) downstream from gaging station, 14.0 mi (22.5 km) east of Buffalo, and at mile 289.0 (465.0 km).

DRAINAGE AREA.--11,930 sq mi (30,898.7 km²), of which 4,813 sq mi (12,465.7 km²) is probably noncontributing.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
OCT.								
25...	43	4300	192	0	380	6600	--	12400
NOV.								
05...	92	2200	208	2	260	3400	1.7	6430
15...	61	1800	194	0	290	2700	4.0	5120
25...	380	830	198	0	150	1300	2.5	2680
DEC.								
05...	307	2100	250	0	300	3300	1.5	6430
15...	177	2600	220	0	310	4000	.40	7720
25...	152	1500	114	0	280	2300	.40	4650
JAN.								
03...	168	1200	152	0	240	1800	.10	3580
13...	130	1400	244	0	260	2200	2.2	4420
25...	112	860	234	0	230	1400	2.1	2830
FEB.								
05...	113	1300	172	0	270	2000	.30	3940
15...	115	760	222	0	230	1200	.80	2550
25...	103	1200	230	0	270	1800	2.2	3660
MAR.								
05...	68	820	182	0	250	1300	.30	2750
15...	53	1900	210	0	320	2900	.40	5710
25...	51	1600	218	0	290	2500	.90	5030
APR.								
05...	29	1300	188	0	340	2000	.40	4170
15...	15	1600	190	0	370	2500	.30	5060
25...	13	1900	182	0	400	2900	.20	5680
MAY								
05...	22	3000	168	0	400	4700	1.1	8640
15...	235	520	212	0	280	740	5.9	1820
25...	104	490	164	0	260	730	1.9	1740
JUNE								
05...	41	920	234	4	320	1400	.60	3140
15...	37	1700	188	0	290	2600	.80	5270
25...	700	560	168	0	120	820	3.3	1780
JULY								
05...	145	790	222	0	200	1200	1.8	2500
15...	93	240	206	0	120	360	9.4	958
25...	20	17000	194	0	800	26000	--	43600
AUG.								
05...	58	550	216	0	140	820	.10	1780
25...	36	5000	110	0	370	7600	--	13100
SEP.								
05...	285	570	192	2	110	850	.80	1780
15...	222	540	184	0	98	820	1.7	1740
25...	57	660	246	0	210	1000	1.1	2210

07157950 CIMARRON RIVER NEAR BUFFALO, OKLA.

PERIOD OF RECORD.--Chemical analyses: October 1959 to September 1963, July 1968 to current year.
Water temperatures: July 1968 to current year.

REMARKS.--Continuous monitor records for water temperature and specific conductance are collected at this station. No flow Oct. 1, 5-17.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.							
25...	16.9	1440	730	572	69	19000	8.0
NOV.							
05...	8.74	1600	480	310	44	10400	8.4
15...	6.96	843	470	310	36	8470	8.2
25...	3.64	2750	320	160	20	4550	7.9
DEC.							
05...	8.74	5330	560	355	39	10100	8.3
15...	10.5	3690	550	370	48	12100	8.2
25...	6.32	1910	410	316	32	7570	8.2
JAN.							
03...	4.87	1620	410	290	26	6130	8.2
13...	6.01	1550	510	310	27	7450	8.2
25...	3.85	856	500	310	17	4820	8.1
FEB.							
05...	5.36	1200	440	300	27	6510	8.3
15...	3.47	792	420	240	16	4380	8.3
25...	4.98	1020	480	290	24	6060	8.2
MAR.							
05...	3.74	505	420	270	17	4570	7.9
15...	7.77	817	540	370	36	9360	8.2
25...	6.84	693	510	330	31	8310	8.2
APR.							
05...	5.67	327	530	380	25	6920	8.0
15...	6.88	205	590	430	29	8330	8.0
25...	7.72	199	620	470	33	9340	8.0
MAY							
05...	11.8	513	640	500	52	13900	7.7
15...	2.48	1160	360	190	12	3020	7.9
25...	2.37	489	350	220	11	2890	7.6
JUNE							
05...	4.27	348	540	340	17	5070	8.4
15...	7.17	526	460	310	34	8500	8.2
25...	2.42	3360	220	82	16	3080	8.0
JULY							
05...	3.40	979	380	200	18	4340	8.3
15...	1.30	241	280	110	6.2	1660	7.7
25...	59.3	2350	1300	1100	205	58100	8.2
AUG.							
05...	2.42	279	310	130	14	3130	8.2
25...	17.8	1270	280	190	130	21600	8.1
SEP.							
05...	2.42	1370	260	99	15	3140	8.4
15...	2.37	1040	240	89	15	3040	7.9
25...	3.01	340	410	210	14	3750	8.0

07157950 CIMARRON RIVER NEAR BUFFALO, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	20600	6250	7060	7920	6690	8130	55600	3940	2040	2890	4560
2	27100	8580	16200	---	9400	4870	9000	10720	4110	12700	5450	4190
3	36900	5320	16200	6150	9400	4890	7980	9670	4490	7500	3240	3260
4	36900	7280	13800	---	10600	8080	8000	9420	4850	15300	3300	2980
5	---	---	10200	---	6510	4570	8280	20400	5080	4210	3130	3140
6	---	11100	10200	---	4700	4600	10700	6270	5640	3160	2910	2020
7	---	7450	10500	12600	4680	6520	8780	21400	6360	3310	4250	2040
8	---	7460	10000	9630	5460	5250	10200	10200	6950	4080	5480	2210
9	---	11400	11100	6100	4100	4880	7960	12100	7750	4000	6530	15600
10	---	8510	12600	5060	8810	6510	7940	10500	8960	2100	6570	3580
11	---	---	7440	5250	11900	6060	16000	22600	10600	1950	9110	2030
12	---	10700	8670	6650	5240	6840	11700	40500	11500	2120	9140	1200
13	---	11700	7680	7450	5240	7500	11600	3750	46800	2380	9800	1410
14	---	10900	12400	---	4480	6910	8080	2640	29100	1520	---	1380
15	---	8540	12500	---	4380	9360	8360	3020	8500	1660	---	3360
16	---	26400	7100	---	7100	9570	8250	2950	5050	2120	---	1820
17	---	29100	6770	13200	4810	6920	8170	3100	5160	2720	---	1770
18	23400	---	7270	10400	4850	6720	8810	3310	5660	18500	---	1970
19	2490	3500	7180	4860	6200	6310	8650	4210	7820	34000	---	2020
20	4930	4070	7120	5890	6950	5600	13700	3660	9320	4340	---	37500
21	9960	---	6820	5810	5440	6010	16500	4280	8000	3420	---	8240
22	16900	---	6430	7920	7530	6010	13100	4380	6150	5330	---	3170
23	16900	---	7680	7250	---	6260	10100	5910	52200	6960	---	3460
24	19300	---	7720	7210	7670	30900	9750	2210	7170	7160	---	3550
25	19400	---	7710	4970	6060	8310	9340	2900	3410	58100	22500	3870
26	21600	---	8520	5070	5570	7640	46200	4040	2930	2770	20300	4630
27	50700	4170	7520	---	5250	10200	45200	5230	2550	2730	1660	4380
28	29200	6420	6060	---	6620	7400	15100	30500	4120	22200	1880	6030
29	18600	5790	7220	---	6690	9160	12700	4040	2630	10600	7180	4310
30	10200	5940	9410	---	---	9160	49200	3330	2730	1230	2800	4730
31	7740	---	5880	---	---	9940	---	3610	---	1580	1960	---
MONTH	---	---	9100	---	6560	7730	13920	10530	9650	8120	---	4810

TEMPERATURE (°C) OF WATER, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.5	13.0	---	---	---	---	---	17.5	---	27.0	26.0	22.0
2	18.5	11.0	---	---	---	---	---	18.0	---	26.5	26.0	18.0
3	16.0	9.5	---	---	---	---	---	20.0	---	22.5	26.0	19.0
4	16.0	8.5	---	---	---	---	---	18.5	---	21.0	26.0	20.0
5	16.0	11.0	---	---	---	---	22.0	19.0	---	22.0	27.0	22.5
6	16.5	---	---	---	---	---	20.0	16.5	---	22.5	28.0	24.5
7	16.5	---	---	---	---	---	19.0	---	---	24.0	27.0	27.0
8	15.0	---	---	---	---	---	13.5	---	---	25.0	25.0	24.0
9	12.0	---	---	---	---	---	---	---	---	26.5	25.0	23.5
10	12.0	---	---	---	---	---	---	---	---	26.5	25.0	25.5
11	14.0	---	---	---	---	---	---	---	---	24.5	25.5	26.0
12	14.5	---	---	---	---	---	---	---	---	26.0	27.5	27.0
13	13.5	---	---	---	---	---	---	---	---	27.0	28.0	27.0
14	---	---	---	---	---	---	21.0	---	---	28.0	28.0	23.5
15	---	---	---	---	---	---	12.5	---	---	25.0	29.5	24.0
16	---	16.0	6.0	---	---	---	16.5	---	---	24.0	28.0	25.5
17	---	16.0	4.0	---	---	---	17.0	---	24.0	26.5	28.0	27.0
18	18.0	10.0	4.5	---	---	---	20.0	---	24.5	25.5	29.5	27.0
19	14.0	7.5	---	---	---	---	20.0	---	26.0	26.5	28.5	26.0
20	13.0	8.0	---	6.0	---	---	14.0	---	23.0	27.0	29.0	23.0
21	---	9.0	---	3.5	---	---	15.5	---	23.5	26.5	25.5	20.0
22	---	6.5	---	3.0	---	---	17.0	---	23.0	27.0	24.0	19.5
23	---	5.0	---	---	1.5	---	17.0	---	22.5	28.5	26.5	19.5
24	---	6.0	---	---	---	---	16.5	---	25.5	27.5	23.0	22.0
25	---	8.0	---	---	---	---	10.5	---	28.0	29.0	23.5	23.0
26	---	9.0	---	---	---	---	13.0	---	29.0	27.5	24.0	19.5
27	---	7.0	---	---	---	---	15.0	---	28.5	28.5	23.5	22.0
28	19.5	6.0	---	---	---	---	15.0	---	26.5	27.0	22.0	22.5
29	8.0	---	---	---	---	---	15.0	---	26.0	27.5	22.0	17.0
30	9.0	---	---	---	---	---	17.5	---	28.0	27.0	24.5	17.0
31	9.5	---	---	---	---	---	---	---	---	25.5	27.5	---
MONTH	---	---	---	---	---	---	---	---	---	26.0	26.0	23.0

07157950 CIMARRON RIVER NEAR BUFFALO, OKLA.--Continued

DISSOLVED SULFATE (SO_4), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	480	280	310	320	300	320	---	180	91	130	200
2	560	320	420	---	340	220	330	350	180	380	240	190
3	730	240	420	280	340	220	320	340	200	310	150	150
4	730	310	390	---	350	320	320	340	220	410	150	130
5	---	---	350	---	290	210	320	480	230	190	140	140
6	---	360	350	---	210	210	350	280	250	140	130	90
7	---	310	350	380	210	290	330	490	290	150	190	91
8	---	310	340	340	240	240	350	350	300	180	250	99
9	---	360	360	270	180	220	320	370	310	180	290	420
10	---	320	380	230	330	290	320	350	330	94	290	160
11	---	---	310	240	370	270	420	510	350	87	330	91
12	---	350	330	300	240	300	360	820	360	95	330	54
13	---	360	310	310	240	310	360	170	980	110	340	63
14	---	350	370	---	200	300	320	120	590	68	---	62
15	---	320	380	---	200	330	320	140	320	74	---	150
16	---	550	310	---	310	340	320	130	230	95	---	81
17	---	590	300	380	220	300	320	140	230	120	---	79
18	520	---	310	350	220	300	330	150	250	450	---	88
19	110	160	310	220	280	280	330	190	310	650	---	90
20	220	180	310	260	300	250	390	160	330	190	---	740
21	340	---	300	260	240	270	430	190	320	150	---	320
22	430	---	290	320	310	270	380	200	280	240	---	140
23	430	---	310	310	---	280	340	270	1100	300	---	160
24	460	---	310	310	310	610	340	99	310	310	---	160
25	460	---	310	220	270	320	330	130	150	---	500	170
26	490	---	320	230	250	310	960	180	130	120	480	210
27	1100	190	310	---	240	350	940	230	110	120	74	200
28	590	290	270	---	300	310	410	610	180	500	84	270
29	450	260	310	---	300	330	380	180	120	350	310	190
30	350	270	340	---	---	330	1000	150	120	55	130	210
31	310	---	260	---	---	340	---	160	---	71	88	---
MONTH	---	---	330	---	270	300	410	280	310	210	---	170

DISSOLVED SULFATE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	220	154	158	57	68	30	---	41	52	37	110
2	1.2	197	249	---	65	44	31	29	34	214	54	152
3	0.92	114	311	112	57	41	26	24	30	145	28	147
4	0.02	109	343	---	83	59	25	21	23	165	25	115
5	---	---	286	---	89	38	25	28	20	74	21	108
6	---	73	248	---	75	38	28	17	15	54	15	71
7	---	55	219	117	78	55	24	25	14	50	18	66
8	---	53	199	137	91	42	22	19	11	52	19	56
9	---	62	201	178	81	37	20	18	7.4	58	19	274
10	---	56	210	113	117	52	20	18	5.8	40	14	150
11	---	---	168	89	81	47	26	55	5.4	42	13	113
12	---	60	163	105	56	48	22	596	16	35	9.8	79
13	---	63	153	107	89	44	17	214	142	88	6.9	60
14	---	59	178	---	82	43	13	86	84	28	---	62
15	---	53	179	---	61	48	13	77	32	18	---	93
16	---	280	147	---	84	48	16	59	22	16	---	44
17	---	1640	134	83	57	43	14	55	23	15	---	38
18	111	---	131	103	56	42	13	45	21	55	---	39
19	54	563	131	144	68	43	12	51	16	65	---	35
20	80	306	126	140	75	39	15	40	13	27	---	240
21	104	---	122	105	60	42	17	40	18	13	---	79
22	94	---	115	98	76	41	15	35	15	17	---	33
23	72	---	127	96	---	45	12	317	199	18	---	31
24	62	---	129	98	80	111	12	75	942	16	---	27
25	54	---	128	67	75	48	12	40	354	---	52	25
26	57	---	134	66	66	40	83	47	221	27	449	25
27	131	188	134	---	63	38	86	52	404	15	189	21
28	62	222	122	---	77	31	32	203	325	112	121	28
29	477	171	147	---	75	34	31	184	126	479	1070	18
30	417	159	184	---	---	32	98	70	95	86	219	18
31	179	---	141	---	---	33	---	88	---	27	67	---
MONTH	---	---	175	---	74	46	27	85	109	69	---	78

07157950 CIMARRON RIVER NEAR BUFFALO, OKLA.--Continued

DISSOLVED CHLORIDE (CL), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	7300	1800	2100	2400	2000	2500	22300	1000	370	670	1200
2	10100	2600	5400	---	2900	1400	2800	3400	1100	4100	1600	1100
3	14300	1500	5400	1800	2900	1400	2400	3000	1200	2300	790	800
4	14300	2200	4500	---	3400	2500	2400	2900	1400	5000	810	700
5	---	---	3200	---	1900	1300	2500	7200	1400	1100	750	760
6	---	3500	3200	---	1300	1300	3400	1800	1600	760	680	370
7	---	2300	3300	4000	1300	1900	2700	7600	1900	810	1100	370
8	---	2300	3100	3000	1600	1500	3200	3200	2100	1100	1600	430
9	---	3600	3500	1800	1100	1400	2400	3900	2400	1100	1900	5100
10	---	2600	4000	1400	2700	1900	2400	3300	2800	390	1900	910
11	---	---	2300	1500	3800	1800	5300	8100	3400	340	2800	370
12	---	3400	2700	2000	1500	2000	3700	15800	3700	400	2800	80
13	---	3700	2300	2300	1500	2300	3700	970	18500	490	3100	150
14	---	3500	4000	---	1200	2100	2500	580	10900	190	---	140
15	---	2600	4000	---	1200	2900	2600	710	2600	240	---	830
16	---	9800	2100	---	2100	3000	2500	690	1400	400	---	300
17	---	10900	2000	4300	1300	2100	2500	740	1500	610	---	280
18	8500	---	2200	3300	1400	2000	2700	810	1600	6400	---	350
19	530	880	2200	1400	1800	1900	2700	1100	2400	13000	---	370
20	1400	1100	2100	1700	2100	1600	4400	940	2900	1200	---	14500
21	3100	---	2000	1700	1600	1800	5500	1200	2400	850	---	2500
22	5700	---	1900	2400	2300	1800	4200	1200	1800	1500	---	770
23	5700	---	2300	2200	---	1800	3200	1700	20800	2100	---	870
24	6700	---	2300	2200	2300	11700	3100	430	2200	2200	---	900
25	6800	---	2300	1400	1800	2600	2900	670	850	23300	8100	1000
26	7700	---	2600	1400	1600	2300	18300	1100	680	630	7200	1300
27	20200	1100	2300	---	1500	3200	17800	1500	550	610	240	1200
28	11000	1900	1800	---	2000	2200	4900	11500	1100	8000	320	1800
29	6400	1700	2200	---	2000	2800	4100	1100	580	3400	2200	1200
30	3200	1700	2900	---	---	2800	19500	820	610	90	640	1300
31	2400	---	1700	---	---	3100	---	920	---	210	340	---
MONTH	---	---	2800	---	1900	2400	4800	3600	3200	2700	---	1400

DISSOLVED CHLORIDE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	3340	1010	1100	437	451	235	2460	240	212	189	674
2	21	1610	3180	---	570	271	264	284	201	2310	345	907
3	18	723	3980	730	499	258	204	212	182	1060	151	802
4	0.38	776	3900	---	796	461	191	183	142	2010	138	604
5	---	---	2660	---	588	230	199	427	124	441	114	581
6	---	723	2310	---	462	235	265	110	96	292	80	287
7	---	402	2080	1260	477	365	198	391	91	277	111	268
8	---	384	1820	1220	582	265	208	173	73	310	123	246
9	---	627	1990	1170	479	231	151	188	55	316	125	3400
10	---	453	2260	711	972	343	151	170	49	169	89	848
11	---	---	1220	567	842	306	330	879	52	163	115	460
12	---	576	1350	699	353	325	222	11530	158	149	84	118
13	---	645	1140	779	561	325	170	1230	2700	404	62	185
14	---	578	1900	---	498	296	100	423	1560	78	---	97
15	---	434	1920	---	368	418	104	404	262	57	---	516
16	---	4930	1020	---	587	428	123	309	138	66	---	158
17	---	30380	899	919	353	291	108	294	146	76	---	133
18	1830	---	935	974	350	281	110	248	137	775	---	153
19	257	3160	927	895	447	286	101	304	122	1300	---	142
20	498	1810	884	910	517	248	167	227	110	165	---	4710
21	954	---	824	682	382	275	224	239	139	71	---	621
22	1250	---	759	751	554	270	171	211	97	106	---	178
23	953	---	945	684	---	298	111	2060	3710	124	---	171
24	908	---	964	692	598	2120	107	325	6640	110	---	153
25	786	---	962	421	492	386	102	207	1970	1260	831	147
26	895	---	1080	412	423	301	1580	280	1150	135	6760	151
27	2450	1120	984	---	398	355	1640	328	1940	73	610	125
28	1150	1460	798	---	509	223	385	3860	1930	1790	456	181
29	6760	1100	1040	---	500	292	330	848	616	4580	7580	110
30	3870	1030	1610	---	---	277	1850	388	476	76	1110	109
31	1340	---	913	---	---	303	---	273	---	82	261	---
MONTH	---	---	1560	---	521	368	336	951	843	614	---	573

07157950 CIMARRON RIVER NEAR BUFFALO, OKLA.--Continued

DISSOLVED SOLIDS, IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	13180	3760	4280	4820	4040	4950	41590	2310	1110	1640	2700
2	18010	5230	10040	---	5750	2890	5500	6590	2410	7830	3260	2470
3	25300	3180	10040	3700	5750	2910	4860	5920	2650	4550	1870	1880
4	25300	4410	8530	---	6510	4920	4870	5760	2880	9480	1900	1700
5	---	---	6260	---	3930	2700	5050	13030	3030	2480	1800	1800
6	---	6830	6260	---	2790	2720	6570	3780	3380	1820	[illegible]	1100
7	---	4520	6450	7770	2770	3940	5360	13770	3830	1910	2500	1110
8	---	4530	6130	5900	3270	3130	6260	6260	4210	2400	3280	1220
9	---	7010	6830	3670	2410	2900	4840	7460	4710	2350	3940	9660
10	---	5190	7770	3010	5380	3930	4830	6450	5470	1150	3970	2080
11	---	---	4520	3130	7330	3650	9920	14670	6510	1050	5570	1100
12	---	6570	5290	4020	3130	4140	7200	28050	7080	1160	5590	579
13	---	7200	4670	4520	3130	4550	7140	2190	33700	1320	6000	711
14	---	6700	7650	---	2650	4180	4920	1490	19500	780	---	692
15	---	5210	7710	---	2590	5730	5100	1730	5180	869	---	1940
16	---	17490	4300	---	4300	5860	5030	1680	3010	1160	---	970
17	---	19500	4090	8150	2860	4190	4980	1780	3080	1540	---	938
18	15260	---	4410	6380	2880	4060	5380	1910	3390	11620	---	1060
19	1390	2030	4350	2890	3730	3800	5280	2480	4760	23140	---	1100
20	2930	2390	4310	3540	4210	3350	8470	2130	5700	2560	---	25740
21	6110	---	4120	3490	3250	3610	10230	2520	4870	1980	---	5020
22	10480	---	3880	4820	4570	3610	8090	2590	3700	3180	---	1820
23	10480	---	4670	4400	---	3770	6190	3550	38540	4210	---	2000
24	12210	---	4690	4370	4660	20840	5970	1220	4350	4340	---	2060
25	12290	---	4690	2960	3650	5060	5710	1650	1970	43830	14590	2260
26	13920	---	5200	3020	3340	4640	33160	2370	1670	1570	12960	2740
27	37190	2450	4570	---	3130	6260	32260	3120	1430	1540	869	2590
28	19570	3870	3650	---	4000	4490	9350	20540	2420	14370	1010	3630
29	11690	3470	4380	---	4040	5600	7830	2370	1480	6510	4350	2540
30	6260	3570	5760	---	---	5600	35850	1920	1540	598	1590	2810
31	4700	---	3530	---	---	6090	---	2100	---	818	1060	---
MONTH	---	---	5560	---	3960	4750	9040	6860	6290	5260	---	2930

DISSOLVED SOLIDS (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	6050	2070	2220	872	917	468	4600	536	632	466	1460
2	38	3180	5910	---	1120	578	520	551	443	4440	722	2000
3	32	1520	7400	1500	978	549	406	416	394	2130	358	1890
4	0.68	1560	7460	---	1550	917	381	358	303	3810	324	1470
5	---	---	5190	---	1200	497	395	774	262	970	272	1390
6	---	1400	4490	---	993	507	515	224	201	696	197	861
7	---	806	4040	2410	1030	744	391	707	186	650	243	799
8	---	770	3560	2390	1220	558	405	338	148	686	257	693
9	---	1210	3850	2400	1060	493	301	362	111	703	255	6390
10	---	897	4340	1510	1920	700	300	331	96	492	182	1940
11	---	---	2450	1190	1620	630	616	1580	100	503	226	1370
12	---	1120	2660	1420	743	659	428	20450	306	432	166	854
13	---	1240	2280	1560	1180	652	328	2790	4910	1090	122	676
14	---	1120	3650	---	1080	598	199	1080	2790	318	---	469
15	---	858	3680	---	803	820	206	979	518	206	---	1210
16	---	8830	2070	---	1180	839	244	754	292	191	---	518
17	---	54220	1820	1760	756	588	215	705	307	191	---	448
18	3300	---	1880	1900	747	570	218	583	284	1410	---	468
19	677	7290	1870	1910	917	585	200	669	244	2310	---	426
20	1060	4010	1780	1880	1040	516	320	518	216	359	---	8340
21	1860	---	1670	1410	799	566	414	524	276	166	---	1230
22	2290	---	1550	1500	1110	556	328	461	200	224	---	423
23	1760	---	1890	1380	---	611	217	4260	6870	250	---	395
24	1650	---	1930	1390	1200	3770	210	916	13380	223	---	351
25	1430	---	1920	894	1010	766	201	508	4570	2370	1500	330
26	1620	---	2150	873	883	602	2860	621	2810	339	12240	326
27	4520	2470	1970	---	838	693	2960	691	5060	183	2210	272
28	2060	2990	1640	---	1040	449	732	6880	4270	3220	1450	372
29	12310	2290	2090	---	1020	575	635	1880	1580	8890	15270	240
30	7550	2130	3160	---	---	544	3390	908	1200	502	2770	235
31	2680	---	1890	---	---	592	---	623	---	316	803	---
MONTH	---	---	3040	---	1070	730	634	1840	1760	1250	---	1260

07158000 CIMARRON RIVER NEAR WAYNOKA, OKLA.

LOCATION.--Lat 36°30'55", long 98°52'45", near center of sec.35, T.24 N., R.16 W., Woods County, at gaging station at bridge on U.S. Highway 281, 0.8 mi (1.3 km) downstream from Main Creek, 5.0 mi (8.0 km) south of Waynoka, and at mile 247.0 (397.4 km).

DRAINAGE AREA.--13,334 sq mi (34,535.1 km²), of which 4,830 sq mi (12,509.7 km²) is probably noncontributing.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SODIUM (NA) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)
OCT.								
25...	4.2	13000	156	0	680	20000	.5	--
NOV.								
05...	159	7300	172	0	490	11000	.6	--
15...	61	10000	214	0	600	16000	.7	--
25...	460	2800	194	0	420	4200	.6	2.7
DEC.								
05...	130	7700	180	0	520	12000	.6	--
15...	118	5700	84	0	470	8900	.5	--
25...	170	5600	238	0	480	8800	1.0	--
JAN.								
05...	90	6300	202	0	540	9700	1.0	--
15...	86	5500	248	0	590	8400	.9	--
25...	136	5100	242	0	500	7800	.9	--
FEB.								
05...	113	8000	152	0	660	12000	.7	--
15...	130	6800	240	0	580	11000	.9	--
25...	102	5400	220	0	500	6300	.9	--
MAR.								
05...	76	5900	224	0	500	8900	.3	--
15...	59	7200	208	0	560	11000	.6	--
25...	59	7600	200	0	580	12000	.5	--
APR.								
05...	27	9700	208	0	670	15000	.6	--
15...	12	11000	224	0	890	17000	.6	--
25...	18	11000	190	0	860	17000	.5	--
MAY								
05...	35	16000	146	0	990	25000	1.0	--
15...	294	2900	222	0	300	4400	.9	2.9
25...	402	2800	202	0	260	4300	.8	1.4
JUNE								
05...	50	5700	220	0	510	8700	1.2	--
15...	106	9000	170	0	610	14000	.6	--
25...	460	11000	194	0	690	17000	.8	--
JULY								
05...	151	4200	92	20	300	6600	.9	--
15...	193	5200	194	0	340	8200	.9	--
25...	12	8900	172	0	560	14000	1.0	--
AUG.								
05...	55	3100	128	0	470	4900	.6	.90
25...	49	5100	118	0	430	8000	.7	--
SEP.								
05...	347	2400	184	0	190	3800	.8	.60
15...	237	2000	190	0	150	3200	.8	.60
25...	66	4900	224	0	320	7800	.9	--

07158000 CIMARRON RIVER NEAR WAYNOKA, OKLA.

PERIOD OF RECORD.--Chemical analyses: October 1952 to September 1963, July 1968 to current year. Water temperatures: July 1968 to current year.

REMARKS.--Continuous monitor records for water temperature and specific conductance are collected at this station. No flow Oct. 1-18, Aug. 13-23.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.								
25...	36700	49.9	416	1200	1070	163	49100	7.8
NOV.								
05...	20200	27.5	8670	820	679	111	29700	7.7
15...	27800	37.8	4580	1100	924	131	39800	7.8
25...	8100	11.0	10100	480	321	56	13100	8.3
DEC.								
05...	22000	29.9	7720	890	742	112	31100	8.3
15...	16400	22.3	5220	720	651	93	23800	8.3
25...	16000	21.8	7340	840	645	84	23600	8.2
JAN.								
05...	17400	23.7	4230	900	730	91	26200	8.0
15...	15100	20.5	3510	830	630	83	22800	8.0
25...	14800	19.0	5140	780	580	79	21600	8.2
FEB.								
05...	21400	29.1	6530	990	870	111	32200	8.0
15...	18600	25.3	6530	950	750	96	27900	8.1
25...	15000	20.4	4130	810	630	83	22600	8.1
MAR.								
05...	16200	22.0	3320	740	560	94	24300	8.0
15...	19600	26.7	3120	940	770	102	29000	8.1
25...	21000	28.6	3340	1000	840	105	30800	8.1
APR.								
05...	26100	35.5	1900	1200	1000	122	37900	8.1
15...	30200	41.1	978	1200	1000	138	43600	8.2
25...	28600	38.9	1390	1200	1000	138	41000	8.1
MAY								
05...	42700	58.1	4040	1600	1500	174	58000	8.0
15...	8020	10.9	6370	480	300	58	13300	7.6
25...	7860	10.7	8530	420	250	59	12900	8.0
JUNE								
05...	15500	21.1	2090	860	680	85	24000	8.3
15...	25300	34.4	7240	1400	1300	105	36000	8.3
25...	29300	39.8	36400	1200	1000	138	42000	7.7
JULY								
05...	11300	15.4	4610	560	450	77	18000	8.9
15...	14100	19.2	7350	680	521	87	22000	8.1
25...	24500	33.3	794	1000	860	122	35800	8.3
AUG.								
05...	8780	11.9	1300	740	640	50	14200	7.6
25...	13600	18.5	1800	730	630	82	21800	7.6
SEP.								
05...	6960	9.47	6520	400	250	52	11600	8.0
15...	5820	7.92	3720	360	200	46	9700	7.6
25...	13800	18.8	2460	700	520	81	21600	8.1

07158000 CIMARRON RIVER NEAR WAYNOKA, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972 (CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	17900	16900	26000	31800	22800	35300	59700	12900	10400	4120	8290
2	---	22500	17000	21700	32000	25700	37000	52400	16400	11900	11900	6980
3	---	35000	16900	21600	---	27100	36800	62200	16500	12700	41300	9890
4	---	34500	21100	26800	---	27400	40000	67200	23700	18200	16200	16400
5	---	29300	31800	26300	34900	24600	43500	59500	23800	17800	14500	11600
6	---	30700	31800	32100	---	26000	40700	58200	30700	27200	14100	11500
7	---	31000	26100	31900	---	26200	36700	50200	30700	27500	27200	13000
8	---	31400	24900	36100	---	26000	43400	52100	37600	18100	27000	6580
9	---	31700	26200	36100	---	31000	42200	56900	38400	17900	30800	7950
10	---	36500	26000	32400	---	26600	43200	56500	36200	21200	29000	7970
11	---	35600	29400	32400	18900	16000	42500	53000	38200	21300	34400	26100
12	---	37100	29500	14400	19500	21500	49800	29500	30800	14200	33200	26100
13	---	38800	23300	14300	19600	32300	45300	47200	35300	14100	34300	9360
14	---	40200	23300	23400	---	50100	49800	46200	36100	22300	33000	9280
15	---	40700	24400	23600	---	19800	42800	13700	32100	19700	28100	9700
16	---	41400	24400	28700	17800	23600	39500	13000	64400	10500	---	13610
17	---	34900	28800	28700	18500	25700	41300	18700	51700	12800	---	14300
18	---	26600	29200	32800	---	31900	43900	18700	49900	15400	---	14600
19	---	11200	23700	32800	---	29700	44600	18700	52600	18400	---	13800
20	11500	13500	23600	28600	---	29200	51000	21300	51400	26500	---	13400
21	20800	12400	23500	14000	---	30300	58300	21500	47200	33000	---	15600
22	42600	12400	---	---	---	38700	55200	45200	43800	33600	---	16300
23	47700	1520	---	22700	---	29600	48900	26400	31700	36800	---	25700
24	46700	13300	---	25300	---	30200	40000	28200	25500	33100	---	27800
25	51800	13100	---	22400	---	31900	44000	22000	31800	53000	20600	21300
26	51300	13100	25300	---	---	31800	43900	13000	11400	27600	24600	21700
27	33400	14400	---	---	27200	34500	44500	11500	7630	38500	39500	28300
28	52000	14200	25800	---	25600	35000	47200	17700	11200	60200	36900	35500
29	55400	14800	23700	---	20900	37100	38900	17600	12300	58800	7640	19700
30	11100	14800	23700	---	---	36800	38700	17500	10600	33900	13100	36400
31	24400	---	25800	---	---	35000	---	13000	---	38900	9250	---
MONTH	---	24820	24850	---	---	29490	43630	35110	31420	25980	---	16560

TEMPERATURE (°C) OF WATER, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972 (CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	17.0	---	---	2.5	7.5	13.0	19.0	---	28.0	25.5	---
2	---	14.5	---	---	1.0	6.0	16.0	19.5	---	27.0	25.5	---
3	---	12.5	---	---	1.0	8.0	13.5	21.0	---	25.0	26.0	---
4	---	13.0	---	---	1.5	7.5	11.5	17.5	---	22.0	25.5	---
5	---	13.0	---	---	4.0	8.5	16.0	20.5	---	23.5	25.0	---
6	---	10.0	---	---	4.0	12.0	19.5	19.5	---	24.0	25.5	---
7	---	9.0	---	---	2.5	13.0	18.5	18.5	---	24.0	25.5	---
8	---	11.0	---	---	5.0	10.5	15.0	21.0	28.5	24.5	24.5	---
9	---	12.0	---	---	4.0	12.0	15.5	19.5	26.5	27.0	23.5	---
10	---	13.0	---	---	1.5	19.5	21.0	18.5	26.0	27.0	23.5	---
11	---	13.5	---	---	1.5	18.5	21.0	18.0	26.5	25.5	24.5	---
12	---	15.5	---	---	5.0	19.0	18.5	20.0	27.0	27.0	26.0	27.0
13	---	17.0	---	---	7.5	16.5	19.0	20.5	26.0	28.0	---	25.0
14	---	15.0	---	---	8.0	17.0	19.0	18.0	28.0	27.0	---	22.0
15	---	17.5	---	---	7.5	15.5	12.5	21.0	28.5	25.0	---	23.5
16	---	17.5	---	---	8.5	14.5	16.5	24.0	29.0	24.0	---	24.5
17	---	18.0	---	---	10.0	16.0	20.5	24.0	26.5	26.0	---	24.5
18	---	10.5	---	---	9.5	14.5	---	25.0	26.5	25.5	---	24.5
19	17.5	9.0	---	---	8.5	15.5	---	24.5	29.0	25.5	---	24.0
20	16.0	10.0	---	6.5	10.5	16.5	---	24.0	26.5	27.0	---	21.5
21	18.0	10.5	---	4.5	12.0	16.0	17.0	24.0	25.0	27.5	---	17.5
22	18.5	7.0	6.5	6.0	5.0	16.5	18.5	25.5	25.0	28.0	---	18.0
23	16.0	6.0	8.5	8.0	9.0	14.0	16.0	25.0	24.5	28.5	---	18.5
24	16.5	7.5	9.0	7.5	12.0	13.0	15.5	25.0	28.5	28.5	---	20.5
25	19.0	8.0	12.0	4.0	10.0	14.5	12.0	24.0	29.0	27.5	---	22.0
26	19.0	9.5	13.0	3.0	9.0	16.5	15.0	23.5	30.5	28.0	---	17.0
27	17.0	8.5	8.5	1.5	11.0	15.0	18.0	24.0	30.5	28.5	---	20.5
28	18.5	7.5	---	1.5	14.0	9.5	18.5	23.0	28.0	27.5	---	21.0
29	12.0	5.0	---	1.5	14.5	11.0	17.0	---	28.5	26.5	---	15.0
30	13.0	---	---	2.0	---	12.5	19.0	---	29.0	27.0	---	15.0
31	13.0	---	---	3.0	---	12.0	---	---	---	25.5	---	---
MONTH	---	11.5	---	---	7.0	13.5	17.0	21.5	---	26.5	---	---

07158000 CIMARRON RIVER NEAR WAYNOKA, OKLA.--Continued

DISSOLVED SULFATE (SO_4), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	480	390	520	600	470	650	990	300	240	95	190
2	---	470	390	460	600	510	670	890	380	280	280	120
3	---	640	390	450	---	530	670	1000	380	290	730	230
4	---	640	450	530	---	540	710	1100	400	410	380	380
5	---	560	600	520	640	500	760	940	490	420	340	270
6	---	580	600	600	---	520	720	970	580	530	330	270
7	---	590	520	600	---	520	670	860	580	940	530	300
8	---	590	500	660	---	520	760	890	680	400	530	150
9	---	600	520	660	---	590	750	950	690	480	590	180
10	---	670	520	610	---	520	760	950	660	450	560	190
11	---	650	560	610	420	370	750	900	690	450	640	520
12	---	670	570	330	420	450	850	570	580	330	620	520
13	---	700	480	330	430	610	790	820	650	330	630	220
14	---	720	480	480	---	860	850	800	660	460	620	220
15	---	720	490	480	---	430	750	320	600	430	550	230
16	---	730	490	550	400	480	710	300	1100	240	---	320
17	---	640	560	550	410	510	730	410	880	300	---	330
18	---	520	560	610	---	600	770	410	850	360	---	340
19	---	260	480	610	---	570	780	410	890	410	---	320
20	270	310	480	550	---	560	870	450	880	520	---	310
21	440	290	480	320	---	580	970	450	820	620	---	360
22	750	290	---	---	---	700	930	790	770	620	---	380
23	820	35	---	470	---	570	840	520	600	670	---	510
24	810	310	---	510	---	580	710	550	510	620	---	500
25	880	300	---	470	---	600	770	460	600	900	550	450
26	870	300	510	---	---	600	770	300	260	540	500	460
27	620	330	---	---	530	640	780	270	180	690	710	550
28	880	330	510	---	510	640	820	400	260	1000	670	650
29	930	340	480	---	440	670	700	400	290	980	180	430
30	260	340	480	---	---	670	700	400	250	630	300	660
31	490	---	510	---	---	640	---	300	---	700	210	---
MONTH	---	490	500	---	---	570	770	640	580	510	---	350

DISSOLVED SULFATE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	227	269	230	184	123	59	217	113	185	29	876
2	---	201	276	199	159	123	58	149	106	345	57	294
3	---	212	312	181	---	126	56	139	84	266	115	302
4	---	222	401	128	---	121	54	128	81	203	50	374
5	---	156	504	124	196	106	56	99	62	154	50	239
6	---	135	492	156	---	110	49	79	46	181	29	181
7	---	116	409	178	---	99	40	58	30	142	33	181
8	---	109	371	213	---	95	41	53	24	97	27	103
9	---	110	360	261	---	111	34	57	21	78	20	136
10	---	111	334	327	---	95	31	56	20	68	6.3	85
11	---	111	334	445	162	62	32	90	43	108	3.8	316
12	---	114	310	186	122	77	32	580	41	94	0.53	316
13	---	115	237	151	140	101	23	610	20	79	0.00	239
14	---	118	249	142	---	146	20	946	60	81	0.00	169
15	---	119	257	104	---	68	20	242	140	194	0.00	178
16	---	129	234	138	141	73	17	189	140	62	---	203
17	---	352	270	165	126	76	16	222	124	51	---	171
18	---	6790	273	198	---	89	16	189	58	69	---	139
19	---	1870	224	215	---	81	16	163	51	358	---	112
20	54	971	224	275	---	77	99	153	35	120	---	118
21	72	573	223	179	---	78	158	133	15	40	---	198
22	67	573	---	---	---	96	78	215	3.3	27	---	138
23	47	111	---	199	---	80	52	123	32	27	---	127
24	26	830	---	193	---	78	39	112	152	22	---	115
25	19	595	---	138	---	91	37	401	859	29	125	75
26	24	458	220	---	---	95	37	158	510	16	123	66
27	39	414	---	---	157	88	48	98	174	19	90	70
28	43	378	216	---	146	73	64	159	736	27	912	72
29	498	334	204	---	122	67	186	192	516	177	306	37
30	241	271	206	---	---	65	133	176	261	98	951	48
31	470	---	222	---	---	59	---	154	---	319	843	---
MONTH	---	494	296	---	---	91	51	204	152	120	---	189

07158000 CIMARRON RIVER NEAR WAYNOKA, OKLA.--Continued

DISSOLVED CHLORIDE (CL), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	6300	5900	9700	12100	8400	13700	25600	4300	3300	950	2500
2	---	8300	6000	7900	12200	9600	14500	22000	5700	3900	3900	1300
3	---	13500	5900	7900	---	10200	14400	26800	5800	4200	16600	3100
4	---	13300	7700	10100	---	10300	16000	29200	8800	6500	5600	5700
5	---	11100	12100	9800	13500	9100	17700	25500	8800	6300	4900	3800
6	---	11700	12100	12300	---	9700	16300	24800	11700	10200	4800	3700
7	---	11800	9800	12200	---	9800	14400	20900	11700	10300	10200	4300
8	---	12000	9300	14100	---	9700	17600	21900	14800	6400	10100	1900
9	---	12100	9800	14100	---	11800	17000	24200	15200	6300	11700	2400
10	---	14300	9700	12400	---	10000	17500	24000	14100	7700	11000	2400
11	---	13800	11100	12400	6800	5600	17200	22300	15100	7800	13200	9800
12	---	14600	11200	8900	7000	7800	20700	11200	11700	4800	12700	9800
13	---	15400	8600	4800	7100	12300	18600	19500	13700	4800	13200	2900
14	---	16100	8600	8600	---	20900	20700	19000	14100	8200	12600	2900
15	---	16300	9100	6700	---	7100	17300	4600	12300	7100	10600	3100
16	---	16700	9100	10800	6300	8700	15700	4300	27900	3400	---	4600
17	---	13500	10900	10800	6600	9600	16600	6700	21700	4200	---	4800
18	---	10000	11100	12600	---	12200	17900	6700	20800	5300	---	5000
19	---	3600	8800	12600	---	11300	18200	6700	22100	6600	---	4600
20	3700	4500	8700	10800	---	11100	21300	7800	21500	9900	---	4500
21	7600	4100	8700	4700	---	11500	24900	7800	19500	12600	---	5400
22	17200	4100	---	---	---	15300	23400	10500	17800	12900	---	5700
23	19700	---	---	8300	---	11200	20300	9900	12100	14400	---	9600
24	19200	4400	---	9400	---	11500	16000	10600	9500	12700	---	10500
25	21700	4300	---	8200	---	12200	17900	8100	12100	22300	10800	7800
26	21500	4300	9400	---	---	12100	17900	4300	3700	10400	9100	7900
27	12800	4900	---	---	10200	13300	18200	3700	2300	15200	15700	10700
28	21800	4800	9600	---	9600	13500	19500	6300	3600	25600	14500	13800
29	23500	5100	8800	---	7600	14600	15400	6200	4000	25100	2300	7100
30	3600	5100	8800	---	---	14400	15300	6200	3400	13000	4300	14200
31	9100	---	9600	---	---	13500	---	4300	---	15400	2900	---
MONTH	---	9600	9200	---	---	11200	17700	14200	12300	9900	---	5900

DISSOLVED CHLORIDE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	3680	4110	4330	3730	2200	1260	5590	1610	2550	290	11510
2	---	3570	4240	3470	3230	2300	1250	3680	1590	4870	797	3250
3	---	4460	4700	3150	---	2420	1210	3620	1270	3790	2600	4120
4	---	4630	6900	2440	---	2340	1210	3390	1470	3230	745	5630
5	---	3080	10220	2340	4120	1950	1290	2540	1120	2430	731	3360
6	---	2710	9990	3180	---	2070	1100	2010	914	3480	424	2540
7	---	2290	7720	3620	---	1880	853	1410	599	2740	634	2580
8	---	2200	6870	4560	---	1780	952	1300	520	1540	520	1270
9	---	2220	6800	5590	---	2230	828	1440	451	1230	411	1770
10	---	2390	6300	6690	---	1800	710	1430	419	1170	163	1080
11	---	2350	6580	9090	2630	929	743	2230	937	1860	79	5950
12	---	2480	6130	2720	2020	1330	784	11470	823	1370	11	5950
13	---	2530	4270	2210	2320	2070	551	14570	591	1140	0.00	3230
14	---	2650	4480	2560	---	3550	487	22410	1290	1430	0.00	2010
15	---	2690	4720	1880	---	1140	463	3500	2850	3220	0.00	2420
16	---	2920	4300	2690	2230	1320	378	2710	3680	861	---	2930
17	---	7390	5290	3220	2030	1420	368	3590	3040	730	---	2500
18	---	90960	5370	4070	---	1010	381	3060	1400	1030	---	2040
19	---	26100	4070	4410	---	1610	364	2630	1250	5750	---	1630
20	756	14000	4050	5370	---	1520	2420	2640	872	2280	---	1700
21	1220	8130	4030	2600	---	1550	4030	2310	368	819	---	2950
22	1540	8130	---	---	---	2110	1960	5050	77	557	---	2070
23	1120	---	---	3540	---	1570	1260	2320	653	584	---	2380
24	623	11910	---	3590	---	1550	862	2180	2850	445	---	2230
25	475	8510	---	2440	---	1840	871	7020	17430	723	2450	1300
26	580	6550	4100	---	---	1930	868	2250	7140	308	2270	1160
27	795	6070	---	---	3010	1830	1130	1370	2230	412	2000	1350
28	1060	9520	4160	---	2730	1540	1520	2500	10270	697	19680	1530
29	12550	4920	3690	---	2090	1450	2290	3000	7310	4540	3940	613
30	3360	4000	3740	---	---	1400	2940	2750	3610	1860	13600	1080
31	8630	---	4160	---	---	1240	---	2190	---	7040	5960	---
MONTH	---	8580	5420	---	---	1800	1180	4130	2620	2090	---	2800

07158000 CIMARRON RIVER NEAR WAYNOKA, OKLA.--Continued

DISSOLVED SOLIDS, IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	11500	10740	17610	21990	15200	24640	43060	7820	6150	1960	4740
2	---	14970	10820	14360	22140	17390	25920	37550	10360	7150	7150	2540
3	---	24610	10740	14290	---	18440	25770	44950	10440	7680	29170	5810
4	---	24030	13910	18220	---	18670	28180	48730	15880	11720	10210	10360
5	---	20100	21990	17840	24330	16550	30830	42910	15950	11420	8930	6950
6	---	21160	21990	22220	---	17610	28710	41930	21160	18520	8630	6880
7	---	21390	17690	22070	---	17760	25690	35890	21160	18740	18520	7880
8	---	21690	16780	25240	---	17610	30750	37320	26370	11650	18370	3600
9	---	21920	17760	25240	---	21390	29850	40950	26980	11500	21240	4520
10	---	25540	17610	22450	---	18070	30600	40640	25310	13990	19880	4530
11	---	24860	20180	22450	12250	10060	30070	38000	26830	14060	23960	17690
12	---	25990	20260	8850	12700	14210	35590	20260	21240	8700	23050	17690
13	---	27280	15570	8780	12780	22370	32190	33620	24640	8630	23880	5460
14	---	28340	15570	15650	---	35810	35590	32870	25240	14820	22900	5400
15	---	28710	16400	15800	---	12930	38300	8350	22220	12850	19200	5680
16	---	29240	16400	19650	11420	15800	27610	7880	46610	6220	---	8290
17	---	24330	19730	19650	11950	17390	29170	12100	37020	7750	---	8780
18	---	18070	20030	22750	---	22070	31130	12100	35660	9610	---	9000
19	---	6680	15880	22750	---	20410	31660	12100	37700	11870	---	8420
20	6880	8220	15800	19580	---	20030	36490	14060	36790	17990	---	8150
21	13690	7480	15720	8550	---	20860	42000	14210	33620	22900	---	9760
22	30150	7480	---	---	---	27200	39660	32110	31050	23350	---	10290
23	34000	---	---	15120	---	20330	34910	17910	21920	25770	---	17390
24	33240	8080	---	17080	---	20780	28180	19270	17230	22970	---	18970
25	37100	7950	---	14890	---	22070	31210	14590	21990	38000	19580	14060
26	36720	7950	17080	---	---	21990	31130	7880	6820	18820	16550	14360
27	23200	8850	---	---	18520	24030	31580	6880	4300	27050	27810	19350
28	37250	8700	17460	---	17310	24410	33620	11340	6680	43440	25840	24790
29	39810	9150	15880	---	13760	25990	27350	11270	7420	42380	4310	12850
30	6620	9150	15880	---	---	25770	27200	11190	6280	23580	7950	25470
31	16400	---	17460	---	---	24410	---	7880	---	27350	5380	---
MONTH	---	17350	16740	---	---	20250	30930	24510	21760	17630	---	10660

DISSOLVED SOLIDS (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	6520	7450	7850	6770	3980	2260	9420	2950	4720	599	21640
2	---	6470	7680	6280	5860	4180	2240	6290	2880	8960	1470	6470
3	---	8040	8670	5710	---	4380	2160	6070	2310	6950	4570	7660
4	---	8370	12510	4430	---	4230	2130	5660	2660	5850	1350	10210
5	---	5590	18530	4240	7420	3530	2250	4290	2020	4410	1330	6190
6	---	4910	18110	5760	---	3760	1940	3400	1660	6300	769	4680
7	---	4160	13990	6550	---	3410	1530	2420	1090	4960	1150	4730
8	---	3980	12460	8180	---	3230	1660	2220	926	2800	942	2440
9	---	4020	12330	10020	---	4040	1450	2430	801	2230	745	3340
10	---	4280	11410	12120	---	3270	1240	2410	752	2110	295	2040
11	---	4230	11930	16480	4760	1680	1300	3800	1670	3380	142	10790
12	---	4420	11100	4920	3670	2420	1350	20780	1490	2490	20	10790
13	---	4490	7740	4000	4210	3740	956	25150	1060	2070	0.00	6030
14	---	4670	8120	4650	---	6090	836	38780	2320	2600	0.00	3750
15	---	4730	8550	3410	---	2060	810	6360	5160	5830	0.00	4500
16	---	5130	7800	4880	4040	2390	668	4960	6170	1590	---	5330
17	---	13340	9590	5840	3680	2580	646	6500	5200	1340	---	4530
18	---	64860	9730	7370	---	3280	664	5550	2410	1870	---	3690
19	---	48180	7370	7980	---	2920	633	4770	2140	10420	---	2950
20	1390	25510	7340	9730	---	2760	4140	4780	1490	4130	---	3100
21	2220	14930	7300	4710	---	2820	6800	4180	635	1480	---	5350
22	2690	14930	---	---	---	3750	3320	8760	134	1010	---	3750
23	1930	---	---	6410	---	2850	2170	4210	1180	1040	---	4320
24	1080	21760	---	6500	---	2810	1520	3950	5170	806	---	4050
25	811	15580	---	4420	---	3340	1520	12730	31590	1230	4480	2350
26	991	12000	7430	---	---	3500	1510	4130	13160	559	4110	2090
27	1440	10990	---	---	5450	3310	1960	2530	4230	730	3530	2460
28	1810	10010	7350	---	4950	2770	2630	4530	18950	1170	35170	2740
29	21280	8920	6690	---	3790	2600	4060	5450	13440	7670	7450	1110
30	6200	7240	6770	---	---	2500	5210	4990	6680	3370	24900	1860
31	15630	---	7540	---	---	2240	---	4020	---	12480	11120	---
MONTH	---	15600	9830	---	---	3240	2050	7270	4740	3760	---	5170

07161000 CIMARRON RIVER AT PERKINS, OKLA.

LOCATION.--Lat 35°57'32", long 97°01'49", in SW1/4SW1/4 sec.7, T.17 N., R.3 E., Payne County, at gaging station at bridge on U.S. Highway 177, 1.0 mi (1.6 km) south of Perkins, 1.5 mi (2.4 km) upstream from Dugout Creek, 4.0 mi (6.4 km) downstream from Wildhorse Creek, and at mile 87.3 (140.5 km).

DRAINAGE AREA.--17,852 sq mi (46,236.7 km²), of which 4,926 sq mi (12,758.3 km²) is probably noncontributing.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	PHOSPHATE (PO4) (MG/L)
OCT.									
05...	231	750	176	0	170	1200	.5	2.7	1.1
15...	75	1300	250	0	230	2000	.6	1.4	1.6
25...	176	1400	242	0	280	2200	.4	6.2	4.0
NOV.									
05...	776	1400	116	0	220	2200	.4	2.8	.74
15...	222	2700	210	4	320	4200	.3	2.9	1.1
25...	996	2700	162	0	220	4200	.5	3.1	.71
DEC.									
05...	516	2700	224	0	300	4200	.5	.60	.94
15...	944	2400	182	0	260	3700	.4	2.4	1.0
25...	509	3200	232	0	500	5000	.5	--	.70
JAN.									
05...	435	3400	286	0	420	5300	.4	--	1.3
15...	350	3500	292	0	500	5600	.4	--	1.4
25...	347	3300	236	12	430	5100	.3	--	.40
FEB.									
05...	235	3500	270	0	440	5400	.7	--	.62
15...	265	3900	242	0	500	6000	.4	--	.76
25...	208	3900	236	0	480	5900	.9	--	.55
MAR.									
05...	181	3400	178	14	470	5200	.7	--	.98
15...	164	3200	246	2	450	5000	.7	--	1.5
25...	147	3100	266	0	440	4900	.9	2.4	2.1
APR.									
05...	98	3500	188	0	510	5500	.6	--	2.0
15...	94	3100	264	0	500	4800	.7	1.8	2.1
25...	155	2200	254	0	480	3400	1.0	3.4	4.6
MAY									
05...	306	780	166	0	180	1200	.4	6.7	2.4
15...	2030	850	180	0	210	1300	.2	9.9	1.6
25...	253	2800	210	0	400	4400	.6	2.0	.74
JUNE									
05...	152	3400	230	0	380	5200	.7	--	1.7
15...	734	740	144	0	120	1100	.6	5.2	.54
25...	391	1800	180	0	250	2900	.4	1.4	.79
JULY									
05...	2160	1100	200	0	140	1600	.7	10	2.1
15...	782	3000	182	0	320	4700	.8	1.4	.69
25...	550	660	114	0	210	980	.5	3.6	.84
AUG.									
05...	158	1500	158	0	220	2400	.7	2.8	1.1
15...	48	3400	212	0	380	5300	.8	--	.88
25...	53	1800	208	0	310	2800	.6	1.5	1.3
SEP.									
05...	944	2900	174	0	270	4600	.8	2.1	.98
15...	540	780	110	0	150	1200	.6	2.0	.64
25...	294	2500	210	0	250	4000	.6	2.6	.99

CHEMICAL ANALYSES OF ADDITIONAL SAMPLES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTANTANEOUS DISCHARGE (CFS)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND (MG/L)
OCT.			
28...	289	30	2.6
NOV.			
17...	109	19	2.6
DEC.			
14...	265	58	--
JAN.			
11...	241	24	3.6
FEB.			
08...	151	3	2.2
MAR.			
21...	155	36	10
APR.			
11...	55	26	8.7
MAY			
03...	312	48	6.0
JUNE			
12...	30	51	6.0
JULY			
06...	1020	140	3.6
AUG.			
16...	18	63	7.9
SEP.			
27...	136	40	.5

07161000 CIMARRON RIVER AT PERKINS, OKLA.

PERIOD OF RECORD.--Chemical analyses: October 1952 to September 1963, June 1965 to current year. Water temperatures: October 1952 to September 1963, June 1965 to current year.

REMARKS.--Continuous monitor records for water temperature and specific conductance are collected for this station.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
OCT.								
05...	2460	3.35	1530	340	196	18	4160	7.8
15...	4240	5.77	859	510	305	25	6950	8.2
25...	4530	6.16	2150	530	331	27	7340	8.3
NOV.								
05...	4400	5.98	9220	320	225	34	7210	8.3
15...	7920	10.8	4750	590	411	48	12900	8.4
25...	7700	10.5	20700	400	267	59	12500	8.1
DEC.								
05...	7840	10.7	10900	540	356	51	12300	8.3
15...	7030	9.56	17900	460	311	49	11200	8.3
25...	9370	12.7	12900	780	590	50	14500	8.3
JAN.								
05...	9910	13.5	11600	820	585	52	15400	8.3
15...	10200	13.9	9640	860	620	52	16000	8.2
25...	9720	13.2	9110	790	576	51	14900	8.5
FEB.								
05...	10000	13.6	6350	870	650	52	15800	8.1
15...	11000	15.0	7870	880	680	57	17500	8.3
25...	10700	14.6	6010	840	650	59	17200	8.2
MAR.								
05...	9700	13.2	4740	820	650	52	15300	8.6
15...	9390	12.8	4160	800	600	49	13800	8.4
25...	9120	12.4	3620	820	600	47	14400	8.2
APR.								
05...	10200	13.9	2700	830	680	53	16400	--
15...	9000	12.2	2280	900	680	45	14400	8.0
25...	6440	8.76	2700	680	470	37	10800	8.0
MAY								
05...	2410	3.28	1990	390	250	17	4160	7.6
15...	2620	3.56	14400	350	200	20	4480	7.8
25...	8580	11.7	5860	640	470	48	13600	8.0
JUNE								
05...	9880	13.4	4060	720	530	55	15600	8.3
15...	2210	3.01	4380	210	92	22	3830	7.7
25...	5480	7.45	5790	530	380	34	9100	7.8
JULY								
05...	3200	4.35	18700	280	120	29	5550	7.6
15...	8620	11.7	18200	680	530	50	13800	7.9
25...	2110	2.87	3130	280	190	17	3590	7.8
AUG.								
05...	4320	5.88	1840	460	330	30	7460	7.0
15...	9000	12.2	1170	740	570	54	15100	7.8
25...	5010	6.81	717	520	350	34	8780	7.9
SEP.								
05...	8420	11.5	21500	560	420	53	13500	7.6
15...	2420	3.29	3530	260	170	21	4250	7.6
25...	7280	9.90	5780	580	410	45	11700	8.1

FIELD ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION
OCT.				
28...	10800	21.0	8.6	97
NOV.				
17...	13200	17.0	8.8	97
DEC.				
14...	9800	9.0	10.2	94
JAN.				
11...	15000	6.5	13.6	117
FEB.				
08...	15500	.0	13.0	94
MAR.				
21...	12700	19.0	11.4	129
APR.				
11...	13900	21.0	8.8	105
MAY				
03...	2600	22.5	6.5	79
JUNE				
12...	17000	32.0	10.0	141
JULY				
06...	3100	26.0	7.5	96
AUG.				
16...	13000	34.5	12.8	186
SEP.				
27...	11700	21.5	8.2	98

07161000 CIMARRON RIVER AT PERKINS, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972 (CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2060	3230	13700	14200	13600	16200	15300	8920	16200	12700	11700	10600
2	2860	2760	12900	13900	14500	15900	16000	7570	17000	20800	13200	9910
3	3080	6560	12800	14600	14600	15500	16300	3410	16600	13000	12100	15300
4	3250	7120	12900	14200	15100	15700	15900	3150	15000	10100	10400	7000
5	4330	7650	12700	15900	15900	15800	14300	4440	15700	5530	7000	11800
6	5250	11300	12600	17200	15000	16400	16700	7020	16200	3460	11900	5450
7	4270	12500	13100	14900	14400	16200	15960	9040	17000	4380	12200	4090
8	5180	12200	14500	13700	15300	16600	15400	10200	20300	6290	14800	4120
9	5470	12000	13800	14600	15500	17500	14300	12500	20500	6830	14100	5220
10	6030	12600	14500	14000	16300	17100	14600	12800	20500	6360	18200	4040
11	6340	13800	17800	15300	16200	16400	16700	13700	19100	6510	14700	8950
12	6620	15200	22700	15200	16200	16700	16400	9940	17100	7560	15000	3360
13	6780	14600	21100	15000	16600	10300	14600	10200	12300	10300	14800	3320
14	6950	13300	19100	15100	17100	12800	16500	11000	4500	8880	13600	4410
15	7000	13000	10900	16800	18400	15400	15200	6050	3880	13800	15200	7510
16	7110	13000	4850	15700	19800	15600	14400	7260	4130	5410	14900	7130
17	7340	13400	2920	15900	17700	16700	14000	4250	4520	5180	18500	6490
18	7160	13500	3370	16100	15400	16000	13300	5290	6070	7060	5260	9250
19	6910	14000	4110	19700	15600	16200	12900	9150	6850	7570	4740	12500
20	6120	14100	6120	17300	14600	15500	9480	17900	5270	10000	8560	12900
21	6240	15500	8260	15100	15300	10300	5280	21300	6620	8590	9650	10600
22	7400	14900	11090	14400	16800	10800	3260	18000	8830	6700	10800	10500
23	6930	13600	11500	13900	17600	11300	5780	15000	9510	6360	12100	10800
24	6450	12600	13600	14300	18400	13800	8050	13500	5040	3460	10300	10500
25	7570	12600	15000	15100	18400	14800	10300	14200	9080	4210	8780	12300
26	8870	14400	14500	15800	17600	15400	12100	13000	6230	5720	6350	14800
27	7100	12100	14100	17700	15400	15900	11100	14300	5010	7400	2970	13200
28	7300	12300	14100	23120	15000	15200	10400	11900	7820	7870	4620	11900
29	5320	13400	14500	19900	15600	15200	10500	12700	10200	9070	7480	12100
30	6370	15700	14700	17600	---	16300	9480	11700	11000	11000	9880	12800
31	8650	---	14600	14700	---	15800	---	11400	---	11100	8830	---
MONTH	6070	12100	12660	15840	16130	15140	12820	10670	11270	8170	11050	9100

TEMPERATURE (°C) OF WATER, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972 (CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.5	14.5	5.0	7.0	4.0	12.0	13.5	23.0	26.0	---	27.5	26.5
2	25.0	14.5	4.0	6.5	2.0	6.0	16.0	21.5	27.0	---	29.0	22.5
3	23.5	13.5	3.5	5.0	0.5	7.5	16.5	22.0	28.5	---	28.5	21.5
4	22.5	13.0	4.0	0.0	1.0	8.5	14.0	20.5	29.5	---	29.0	21.5
5	22.5	13.5	5.0	0.0	2.0	9.0	17.0	21.0	30.0	---	---	23.0
6	22.5	11.5	5.5	0.0	4.5	11.5	21.5	20.5	30.5	---	27.0	24.0
7	22.0	9.5	6.0	0.0	---	14.5	21.0	18.0	30.5	---	28.0	25.5
8	20.0	8.5	7.0	5.0	5.5	11.5	16.5	19.5	29.0	---	25.5	26.5
9	17.5	9.0	6.0	8.5	5.5	12.0	16.5	21.5	28.5	---	29.0	26.5
10	17.0	11.0	6.5	7.0	6.0	15.5	20.5	21.5	29.0	---	29.0	26.0
11	19.0	12.5	6.5	6.5	2.5	18.5	24.5	21.5	28.5	---	26.0	27.5
12	20.5	13.5	6.5	7.0	3.0	18.5	24.5	21.5	28.0	---	---	25.5
13	20.5	15.5	5.5	4.5	6.5	17.0	25.0	22.5	25.0	---	---	27.0
14	20.0	17.0	8.5	0.5	9.5	17.0	25.0	21.0	25.5	---	29.0	25.5
15	21.5	18.0	8.5	0.0	8.5	16.5	18.0	23.0	26.5	---	31.0	---
16	22.0	16.5	7.0	0.5	9.5	15.0	19.0	25.5	26.5	---	31.0	---
17	21.5	16.5	6.5	1.0	11.0	16.0	21.0	27.5	26.5	---	---	---
18	21.5	12.0	6.0	8.5	9.0	17.0	22.5	27.5	26.5	---	30.5	---
19	21.0	9.5	7.0	10.0	8.5	17.5	24.0	27.0	27.0	---	29.5	---
20	18.0	10.0	6.5	8.5	11.0	16.0	22.5	27.5	26.5	---	30.0	---
21	18.5	10.0	6.0	6.0	14.0	17.0	19.5	27.5	25.5	---	---	---
22	17.5	7.5	5.5	6.5	8.0	18.0	20.0	27.5	24.5	---	---	---
23	18.0	6.0	7.5	6.5	10.5	17.0	20.0	26.0	21.5	---	---	---
24	19.0	7.0	8.5	7.5	13.0	14.0	19.0	28.0	25.0	31.0	---	---
25	19.5	7.5	11.0	5.0	13.0	14.5	17.0	29.0	---	29.0	---	---
26	19.0	9.0	13.0	4.0	10.5	17.5	14.0	29.0	---	30.5	---	---
27	18.0	8.5	12.0	1.0	11.5	17.5	15.5	27.5	---	30.5	---	---
28	18.5	8.0	7.0	0.0	14.5	13.0	20.5	26.0	---	28.0	---	---
29	19.0	6.5	9.5	0.5	17.0	11.0	19.0	26.0	---	---	---	---
30	17.5	5.0	9.5	1.0	---	13.0	22.5	24.0	---	29.0	---	---
31	14.5	---	7.5	3.0	---	13.5	---	25.0	---	29.5	23.5	---
MONTH	20.0	11.0	7.0	4.0	8.0	14.5	19.5	24.0	27.0	---	---	---

07161000 CIMARRON RIVER AT PERKINS, OKLA.--Continued

DISSOLVED SULFATE (SO_4), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	140	420	430	420	450	440	310	450	400	390	360
2	130	120	410	420	430	450	450	270	460	520	410	340
3	140	240	410	430	430	440	450	150	460	410	400	440
4	140	260	410	430	440	450	450	140	440	350	360	260
5	180	280	400	450	450	450	430	180	450	210	260	390
6	210	380	400	470	440	460	460	260	450	150	390	210
7	180	400	410	430	430	450	450	320	460	180	400	170
8	200	400	430	420	440	460	440	350	510	240	430	170
9	210	390	420	430	440	470	430	400	510	250	420	200
10	230	400	430	420	450	470	430	410	510	240	480	170
11	240	420	480	440	450	460	460	420	490	240	430	320
12	250	440	550	440	450	460	460	350	470	270	440	150
13	250	430	520	440	460	360	430	350	400	360	430	150
14	260	410	490	440	470	410	460	380	180	310	420	180
15	260	410	370	460	480	440	440	230	160	420	440	270
16	260	410	190	450	500	440	430	270	170	210	430	260
17	270	410	130	450	470	460	420	180	180	200	490	240
18	260	420	150	450	440	450	410	210	230	260	210	320
19	250	420	170	500	440	450	410	320	250	270	190	400
20	230	420	230	470	430	440	330	480	210	350	300	410
21	230	440	300	440	440	360	210	530	250	300	340	360
22	270	430	380	430	460	370	140	480	310	250	370	360
23	260	420	390	420	470	380	220	440	330	240	400	370
24	240	400	420	430	480	420	290	420	200	150	360	360
25	270	400	440	440	480	430	360	430	320	170	310	400
26	310	430	430	450	470	440	400	410	230	220	240	430
27	260	400	420	470	440	450	380	430	200	270	130	410
28	270	400	420	550	440	440	360	390	280	280	190	390
29	210	410	430	510	440	440	360	400	350	320	270	400
30	240	450	430	470	---	450	330	390	380	380	340	410
31	310	---	430	430	---	450	---	390	---	380	310	---
MONTH	230	380	380	450	450	440	390	340	340	280	350	310

DISSOLVED SULFATE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	2160	746	511	385	241	127	193	356	418	95	104
2	93	1140	664	491	421	224	129	601	295	1090	94	310
3	88	1140	634	489	337	227	134	228	243	1030	72	1040
4	80	788	601	309	295	230	121	138	227	1240	75	635
5	106	593	562	291	327	222	116	144	223	1390	96	1620
6	99	621	539	416	339	220	123	184	226	607	76	1010
7	72	541	543	469	312	225	121	203	224	532	87	414
8	75	451	574	541	309	207	135	239	214	457	129	282
9	66	419	591	455	312	211	113	272	175	329	212	280
10	65	379	617	454	303	205	107	262	166	225	177	364
11	65	360	618	476	278	194	118	247	140	184	127	953
12	61	340	686	474	298	204	109	252	122	215	85	933
13	57	304	622	450	318	354	103	263	1320	327	70	411
14	55	268	633	260	334	212	97	961	730	295	61	354
15	51	244	2290	249	352	192	111	1220	310	802	54	380
16	48	227	3120	361	422	185	126	1270	216	231	47	280
17	48	216	2030	522	388	188	129	506	181	129	194	226
18	57	201	867	508	302	179	123	416	310	126	58	310
19	65	189	508	541	282	172	123	585	218	123	28	391
20	75	187	525	496	267	196	138	677	167	139	34	341
21	71	1490	563	456	272	271	310	590	125	475	40	316
22	97	2420	649	441	283	221	105	422	134	447	35	295
23	87	1540	610	427	281	176	114	371	657	739	31	274
24	109	1230	609	424	287	168	110	320	265	323	27	248
25	130	1060	593	418	281	168	137	273	337	241	64	303
26	190	1080	564	481	278	163	137	210	257	203	134	281
27	195	1120	532	397	256	179	157	210	188	177	68	260
28	254	1070	503	357	253	167	146	257	182	141	64	231
29	333	955	506	355	250	158	146	284	171	134	121	223
30	251	881	551	357	---	153	173	288	145	129	125	212
31	1880	---	518	350	---	140	---	259	---	111	91	---
MONTH	162	787	779	427	311	202	131	398	284	420	86	443

07161000 CIMARRON RIVER AT PERKINS, OKLA.--Continued

DISSOLVED CHLORIDE (CL), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	500	820	4600	4800	4600	5700	5300	2800	5700	4200	3800	3400
2	690	670	4300	4700	5000	5500	5600	2300	6000	7500	4400	3200
3	760	2000	4300	5000	5000	5400	5700	880	5800	4400	4000	5300
4	820	2200	4300	4800	5200	5500	5500	790	5200	3200	3300	2100
5	1200	2400	4200	5500	5500	5500	4900	1200	5500	1600	2100	3900
6	1500	3700	4200	6100	5200	5700	5900	2100	5700	900	3900	1600
7	1200	4200	4400	5100	4900	5700	5600	2900	6000	1200	4000	1100
8	1500	4000	5000	4600	5300	5800	5300	3300	7300	1900	5100	1100
9	1600	3900	4700	5000	5400	6200	4900	4200	7400	2100	4800	1500
10	1800	4200	5000	4800	5700	6000	5000	4300	7400	1900	6500	1100
11	1900	4700	6300	5300	5700	5700	5900	4600	6800	2000	5000	2800
12	2000	5300	8300	5300	5700	5900	5700	3200	6000	2300	5200	860
13	2100	5000	7700	5200	5800	3300	5000	3300	4100	3300	5100	850
14	2100	4500	6800	5200	6000	4300	5800	3500	1300	2800	4600	1200
15	2100	4400	3500	5900	6600	5300	5300	1800	1000	4700	5300	2300
16	2200	4400	1400	5500	7100	5400	4900	2200	1100	1600	5100	2200
17	2300	4500	710	5500	6300	5900	4800	1200	1300	1500	6600	2000
18	2200	4600	870	5600	5300	5600	4500	1500	1800	2200	1500	2900
19	2100	4800	1100	7100	5400	5700	4300	2900	2100	2300	1300	4200
20	1800	4800	1800	6100	5000	5400	3000	6400	1500	3200	2700	4300
21	1900	5400	2600	5200	5300	3300	1500	7700	2000	2700	3100	3400
22	2300	5100	3600	4900	5900	3500	830	6400	2800	2000	3500	3400
23	2100	4600	3700	4700	6200	3700	1700	5200	3000	1900	4000	3500
24	1900	4200	4600	4900	6600	4700	2500	4600	1500	900	3300	3400
25	2300	4200	5200	5200	6600	5100	3300	4800	2900	1200	2800	4100
26	2800	4900	5000	5500	6200	5300	4000	4400	1900	1700	1900	5100
27	2200	4000	4800	6300	5300	5500	3600	4900	1400	2300	730	4400
28	2200	4100	4800	8500	5200	5300	3300	3900	2400	2400	1300	3900
29	1500	4500	5000	7200	5400	5300	3400	4200	3300	2900	2300	4000
30	1900	5500	5000	6200	---	5700	3000	3800	3500	3500	3100	4300
31	2700	---	5000	5000	---	5500	---	3700	---	3600	2800	---
MONTH	1800	4000	4300	5500	5600	5200	4300	3500	3800	2600	3700	2900

DISSOLVED CHLORIDE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	481	12380	8290	5830	4260	3010	1530	1730	4450	4390	930	973
2	511	6260	7060	5520	4880	2770	1600	5120	3800	15790	1020	2850
3	492	9260	6690	5690	3920	2760	1680	1340	3080	10990	732	12550
4	460	6590	6380	3530	3520	2810	1500	785	2690	11490	701	5280
5	717	5070	5900	3590	4040	2730	1330	984	2730	10560	796	16080
6	737	5930	5630	5410	4020	2770	1570	1530	2830	3580	759	7620
7	484	5600	5840	5540	3590	2810	1500	1830	2890	3620	881	2710
8	555	4590	6650	6010	3720	2630	1630	2210	3070	3660	1510	1860
9	497	4210	6610	5300	3790	2770	1290	2820	2520	2710	2410	2080
10	510	3950	7150	5130	3800	2650	1240	2770	2400	1810	2380	2370
11	525	4020	8200	5730	3470	2450	1500	2740	1940	1490	1490	8530
12	498	4070	10450	5670	3730	2600	1380	2320	1580	1830	1010	5420
13	473	3540	9120	5330	4040	3280	1200	2440	13520	3030	824	2380
14	452	2910	8770	3100	4330	2240	1230	9040	5040	2640	671	2420
15	427	2610	21480	3190	4760	2320	1330	9650	1970	8960	652	3230
16	400	2420	22340	4420	5970	2250	1450	10710	1420	1740	554	2340
17	402	2370	11130	6440	5130	2390	1450	3390	1250	955	2640	1830
18	480	2220	5040	6330	3640	2210	1340	3110	2450	1050	429	2800
19	540	2130	3340	7630	3440	2150	1300	5270	1800	1050	200	4060
20	593	2130	4160	6460	3110	2380	1260	9020	1240	1280	297	3620
21	566	18140	4930	5430	3270	2520	2310	8690	1020	4210	364	2950
22	824	28530	6130	5080	3620	2070	605	5640	1190	3660	328	2740
23	719	17010	5910	4790	3700	1680	886	4400	5970	5940	312	2570
24	877	12790	6730	4870	3890	1880	954	3520	1930	1910	249	2310
25	1110	11070	7040	4980	3810	1980	1270	3110	3030	1610	567	3100
26	1700	12440	6530	5910	3670	1970	1390	2250	2050	1570	1070	3300
27	1630	11310	6040	5250	3100	2210	1480	2410	1360	1500	374	2820
28	2140	10980	5710	5500	3000	2000	1360	2560	1570	1220	450	2300
29	2490	10440	5860	5030	3040	1890	1360	2980	1580	1210	1030	2250
30	2020	10780	6450	4710	---	1920	1580	2830	1370	1210	1150	2240
31	16720	---	6030	4090	---	1720	---	2490	---	1040	810	---
MONTH	1320	7860	7660	5210	3870	2380	1380	3860	2790	3800	690	3920

07161000 CIMARRON RIVER AT PERKINS, OKLA.--Continued

DISSOLVED SOLIDS, IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1240	1940	8720	9060	8650	10410	9800	5500	10410	8050	7370	6630
2	1720	1660	8180	8860	9260	10200	10270	4580	10950	13510	8380	6160
3	1850	3940	8110	9330	9330	9930	10470	2050	10680	8250	7640	9800
4	1950	4280	8180	9060	9660	10070	10200	1890	9600	6290	6490	4200
5	2600	4640	8050	10200	10200	10140	9120	2660	10070	3320	4200	7440
6	3150	7100	7980	11080	9600	10540	10740	4210	10410	2080	7510	3270
7	2560	7910	8320	9530	9190	10410	10240	5580	10950	2630	7710	2450
8	3110	7710	9260	8720	9800	10680	9870	6360	13170	3770	9460	2470
9	3280	7570	8790	9330	9930	11280	9120	7910	13310	4100	8990	3130
10	3620	7980	9260	8920	10470	11010	9330	8110	13310	3820	11760	2420
11	3800	8790	11490	9800	10410	10540	10740	8720	12360	3910	9390	5520
12	3970	9730	14790	9730	10410	10740	10540	6180	11010	4580	9600	2020
13	4070	9330	13710	9600	10680	6430	9330	6360	7780	6430	9460	1990
14	4170	8450	12360	9660	11010	8110	10610	6900	2700	5470	8650	2650
15	4200	8250	6830	10810	11890	9870	9730	3630	2330	8790	9730	4540
16	4270	8250	2910	10070	12840	10000	9190	4380	2480	3250	9530	4290
17	4430	8520	1750	10200	11420	10740	8920	2550	2710	3110	11960	3890
18	4310	8590	2020	10340	9870	10270	8450	3170	3640	4240	3160	5720
19	4150	8920	2470	12770	10000	10410	8180	5650	4110	4580	2840	7910
20	3670	8990	3670	11150	9330	9930	5870	11550	3160	6220	5250	8180
21	3740	9930	5050	9660	9800	6430	3170	13850	3970	5270	5990	6630
22	4470	9530	6960	9190	10810	6760	1960	11620	5430	4020	6760	6560
23	4160	8650	7240	8860	11350	7100	3470	9600	5890	3820	7640	6760
24	3870	7980	8650	9120	11890	8790	4910	8590	3020	2080	6430	6560
25	4580	7980	9600	9660	11890	9460	6430	9060	5600	2530	5400	7780
26	5460	9190	9260	10140	11350	9870	7640	8250	3740	3430	3810	9460
27	4270	7640	8990	11420	9870	10200	6970	9120	3010	4470	1780	8380
28	4400	7780	8990	15080	9600	9730	6490	7510	4750	4790	2770	7510
29	3190	8520	9260	12900	10000	9730	6560	8050	6360	5600	4520	7640
30	3820	10070	9390	11350	---	10470	5870	7370	6900	6900	6140	8110
31	5310	---	9330	9390	---	10140	---	7170	---	6970	5430	---
MONTH	3660	7660	8050	10160	10360	9690	8140	6710	7130	5040	6960	5670

DISSOLVED SOLIDS (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1190	29410	15590	10910	8010	5540	2830	3380	8180	8340	1790	1900
2	1270	15560	13380	10350	9100	5100	2940	10050	6950	28310	1920	5560
3	1190	18390	12700	10600	7300	5100	3080	3110	5650	20820	1400	23230
4	1090	12950	12100	6600	6520	5190	2760	1880	5000	22420	1370	10380
5	1550	9440	11210	6610	7440	5040	2490	2110	5030	21590	1560	30930
6	1520	11500	10710	9870	7460	5090	2870	3000	5200	8300	1460	15630
7	1050	10680	11050	10290	6700	5170	2770	3570	5290	7810	1690	5960
8	1150	8780	12400	11300	6880	4810	3010	4310	5510	7320	2810	4070
9	1020	8080	12410	9870	7000	5060	2410	5380	4530	5340	4510	4300
10	1030	7520	13330	9610	6990	4850	2320	5260	4310	3610	4320	5220
11	1050	7540	14920	10610	6380	4500	2760	5160	3500	2960	2760	16680
12	987	7540	18610	10510	6860	4760	2530	4520	2880	3600	1870	12680
13	934	6600	16330	9900	7410	6400	2240	4760	25820	5920	1530	5590
14	889	5500	15860	5740	7910	4250	2260	17620	10790	5150	1260	5210
15	839	4940	41870	5840	8640	4290	2470	19410	4390	16820	1210	6340
16	785	4590	46980	8160	10740	4160	2710	21030	3110	3580	1030	4600
17	789	4460	27580	11870	9340	4380	2720	7370	2680	1980	4780	3640
18	942	4170	11790	11640	6740	4080	2530	6410	4930	2060	886	5470
19	1060	4000	7320	13750	6350	3960	2470	10300	3540	2050	422	7730
20	1190	3980	8350	11800	5790	4400	2460	16410	2560	2500	581	6870
21	1130	33530	9650	10070	6060	4910	4770	15550	2030	8230	711	5750
22	1620	53000	11930	9480	6630	4040	1430	10260	2330	7240	639	5350
23	1410	32010	11430	8990	6740	3260	1800	8160	11660	11850	598	5000
24	1740	24340	12660	9090	7060	3540	1870	6630	4030	4420	486	4500
25	2180	21070	13060	9240	6900	3680	2480	5820	5920	3500	1110	5920
26	3320	23210	12180	10890	6680	3650	2660	4250	4100	3190	2140	6130
27	3200	21660	11310	9560	5730	4080	2880	4510	2850	2940	919	5320
28	4210	20970	10680	9770	5570	3700	2650	4920	3080	2390	958	4420
29	5130	19690	10930	9060	5620	3490	2660	5670	3090	2360	2020	4310
30	4020	19900	12000	8580	---	3540	3080	5450	2660	2370	2240	4250
31	32710	---	11230	7610	---	3170	---	4820	---	2030	1580	---
MONTH	2650	15180	14890	9620	7120	4420	2630	7450	5390	7450	1700	7760

07164200 KEYSTONE LAKE NEAR SAND SPRINGS, OKLA.

LOCATION.--Lat 36°09'05", long 96°15'05", in SW1/4SE1/4 sec.4, T.19 N., R.10 E., Tulsa County, at gaging station at Keystone Dam on Arkansas River, 8.5 mi (13.7 km) west of Sand Springs, and at mile 538.8 (866.9 km).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	RESER-VOIR STORAGE (AC-FT)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
OCT.								
16...	576900	180	124	0	69	270	.40	670
NOV.								
01...	596200	160	128	0	66	250	1.4	636
15...	645800	160	130	0	61	240	.10	630
DEC.								
03...	598400	200	134	0	69	300	2.5	724
16...	683100	220	128	0	68	330	.20	802
FEB.								
01...	549200	260	144	0	84	400	.30	946
16...	542100	280	152	0	100	410	3.2	982
APR.								
18...	520000	380	186	0	140	560	.10	1330
MAY								
15...	614400	370	206	0	160	550	.20	1350
JUNE								
04...	584100	300	184	0	140	440	.10	1140
16...	552400	320	172	0	140	470	1.1	1180
JULY								
03...	544100	340	160	0	150	500	.10	1180
19...	564400	370	164	0	140	540	.60	1250
AUG.								
03...	525900	390	156	0	140	580	.40	1320
17...	503900	410	156	0	140	610	.10	1390
SEP.								
01...	488900	470	152	0	140	700	.60	1450

07164200 KEYSTONE LAKE NEAR SAND SPRINGS, OKLA.

DRAINAGE AREA.--74,506 sq mi (192,970.5 km²), of which 12,541 sq mi (32,481.2 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: February 1965 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TUR-BID-ITY (MG/L)
OCT.							
16...	.91	160	58	6.2	1190	8.1	1
NOV.							
01...	.86	180	75	5.2	1130	8.1	15
15...	.86	160	53	5.5	1100	8.0	4
DEC.							
03...	.98	180	70	6.5	1280	8.0	3
16...	1.09	170	65	7.3	1400	7.9	1
FEB.							
01...	1.29	200	82	8.0	1650	8.1	1
16...	1.34	220	95	8.2	1760	8.3	1
APR.							
18...	1.81	290	140	9.7	2320	7.8	2
MAY							
15...	1.84	330	160	8.9	2330	8.0	1
JUNE							
08...	1.55	290	140	7.7	1960	8.2	2
16...	1.60	280	140	8.3	2010	7.9	2
JULY							
03...	1.60	270	140	9.0	2100	7.4	5
19...	1.70	270	140	9.7	2220	7.8	2
AUG.							
03...	1.80	270	140	10	2360	7.6	1
17...	1.89	270	140	11	2440	7.7	1
SEP.							
01...	1.97	270	150	12	2690	7.3	2

07164400 ARKANSAS RIVER AT SAND SPRINGS BRIDGE, NEAR TULSA, OKLA.

LOCATION.--Lat 36°06'48", long 96°06'49", in SW1/4NW1/4 sec.14, T.19 N., R.11 E., Tulsa County, at bridge on State Highway 97 in Sand Springs, 5.1 mi (8.2 km) downstream from Keystone Dam, and 10.0 mi (16.1 km) upstream from gaging station at Tulsa.

DRAINAGE AREA.--74,615 sq mi (193,252.8 km²) upstream from gaging station, of which 12,541 sq mi (32,481.2 km²) is probably noncontributing.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-CHARGE (CFS)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)
OCT.								
05...	1100	180	48	10	76	270	.20	.09
15...	480	190	134	0	75	280	2.3	.29
25...	320	170	136	0	76	260	2.4	.28
NOV.								
05...	4660	160	114	8	68	240	1.0	.20
15...	6150	260	122	0	78	400	3.9	.44
25...	6100	340	128	0	84	510	4.0	.45
DEC.								
05...	600	620	144	0	150	920	3.3	.43
15...	7050	540	136	0	120	800	3.6	.51
25...	6540	340	134	0	90	500	3.8	.52
JAN.								
05...	6150	360	116	12	86	540	3.9	.24
15...	1180	360	144	0	86	530	3.7	.46
25...	945	460	152	0	99	700	4.0	.50
FEB.								
05...	800	490	166	0	110	740	4.0	.46
15...	320	500	86	4	110	760	1.0	.02
25...	2600	610	174	0	130	920	4.0	.53
MAR.								
05...	677	570	180	0	140	890	3.6	.43
15...	6600	560	178	0	140	860	4.6	.52
25...	1020	480	180	0	120	740	4.1	.46
APR.								
05...	1180	460	124	4	130	700	.20	.00
15...	730	410	186	0	120	630	3.0	.28
25...	7500	410	192	0	140	620	3.0	.42
MAY								
05...	800	410	202	0	130	640	2.7	.33
15...	516	410	200	0	140	620	2.7	.35
25...	613	390	192	4	140	600	1.6	.31
JUNE								
04...	261	570	192	0	160	880	1.3	.53
15...	651	540	192	0	160	840	1.5	.66
25...	564	520	194	0	150	790	.90	.50
JULY								
05...	2340	500	180	0	150	750	1.2	.46
15...	915	600	180	0	170	880	1.9	.55
25...	3750	480	174	0	150	750	2.3	.50
AUG.								
05...	1700	500	170	0	140	760	.38	.28
15...	1550	500	166	0	140	760	1.5	.49
25...	854	480	154	0	140	730	1.9	.46
SEP.								
05...	990	480	160	0	140	730	1.8	.41
15...	1180	560	156	0	140	870	1.4	.29

CHEMICAL ANALYSES OF ADDITIONAL SAMPLES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-CHARGE (CFS)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)
OCT.			
26...	6380	19	.9
NOV.			
15...	6150	9	.4
DEC.			
08...	730	9	.5
JAN.			
10...	6370	12	.4
20...	447	11	1.2
FEB.			
09...	950	9	1.0
MAR.			
20...	632	15	2.5
APR.			
11...	600	9	1.7
MAY			
02...	850	20	4.5
JUNE			
13...	613	24	7.4
JULY			
05...	600	17	3.7
AUG.			
15...	492	18	3.1
SEP.			
27...	975	16	.4

ARKANSAS RIVER BASIN

07164400 ARKANSAS RIVER AT SAND SPRINGS BRIDGE, NEAR TULSA, OKLA.

PERIOD OF RECORD.--Chemical analyses: October 1946 to current year.
Water temperatures: October 1946 to current year.

REMARKS.-- Records of discharge are given for Arkansas River at Tulsa, Okla. No appreciable inflow between sampling point and gaging station except during periods of heavy local runoff. Continuous monitor records for water temperature and specific conductance are collected at this station.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.								
05...	620	.84	1840	120	64	7.2	1100	9.3
15...	718	.98	931	170	60	6.3	1210	8.1
25...	700	.95	695	170	58	5.7	1160	8.1
NOV.								
05...	648	.88	8150	160	53	5.5	1190	8.6
15...	918	1.25	15200	180	80	8.4	1600	7.9
25...	1130	1.54	18600	190	85	11	1960	8.3
DEC.								
05...	1930	2.62	3130	240	120	17	3330	8.0
15...	1700	2.31	32400	220	110	16	2940	7.8
25...	1120	1.52	19800	190	80	11	1940	7.8
JAN.								
05...	1190	1.62	19800	200	85	11	2070	9.0
15...	1190	1.62	3790	210	92	11	2060	8.2
25...	1520	2.07	3880	240	115	13	2600	7.9
FEB.								
05...	1660	2.26	3590	270	134	13	2800	8.0
15...	1570	2.14	1360	200	123	15	2760	8.5
25...	1990	2.71	14000	300	157	15	3360	8.1
MAR.								
05...	1840	2.50	3360	310	160	14	3190	8.0
15...	1770	2.41	31500	300	150	14	3130	7.9
25...	1550	2.11	4270	300	150	12	2770	7.9
APR.								
05...	1460	1.99	4650	240	130	13	2600	8.5
15...	1370	1.86	2700	290	140	10	2450	8.2
25...	1380	1.88	27900	300	140	10	2430	8.2
MAY								
05...	1460	1.99	3150	310	140	10	2550	8.1
15...	1450	1.97	2020	320	160	10	2520	8.0
25...	1450	1.97	2400	310	150	9.6	2460	8.4
JUNE								
04...	1940	2.64	1370	340	180	13	3320	7.7
15...	1830	2.49	3220	330	170	13	3140	7.7
25...	1710	2.33	2600	320	160	13	3020	7.2
JULY								
05...	1650	2.24	10400	300	150	13	2910	7.9
15...	1920	2.61	4740	300	150	15	3350	8.0
25...	1620	2.20	16400	290	150	12	2810	7.9
AUG.								
05...	1640	2.23	7530	280	140	13	2880	7.3
15...	1630	2.22	6820	280	140	13	2850	7.4
25...	1550	2.11	3570	280	150	12	2720	7.3
SEP.								
05...	1630	2.22	4360	280	150	12	2820	6.7
15...	1840	2.50	5860	280	150	15	3220	7.5

FIELD ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION
OCT.				
26...	1090	20.0	7.7	92
28...	1400	20.5	8.0	91
NOV.				
15...	1400	16.0	8.0	89
23...	1700	10.5	9.1	86
DEC.				
08...	3200	7.0	10.2	85
JAN.				
10...	2100	8.0	10.7	96
20...	2200	5.5	10.0	84
FEB.				
09...	2800	2.0	12.4	94
MAR.				
20...	2600	13.0	11.2	112
APR.				
11...	2700	23.0	9.8	121
MAY				
02...	2380	19.0	9.0	102
JUNE				
13...	3100	25.5	8.0	102
JULY				
05...	3100	24.5	8.2	101
AUG.				
15...	3100	28.5	7.5	99
SEP.				
27...	3000	22.5	7.8	94

07164400 ARKANSAS RIVER AT SAND SPRINGS, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1080	1160	2350	1840	2960	3590	2620	2370	3370	3230	3060	2900
2	1110	1140	2570	1810	2720	3190	2740	2340	3450	2870	2900	2840
3	1050	1130	2510	1960	2640	3550	2920	2540	3340	2870	2970	2870
4	1070	1110	2430	1850	2940	3420	2750	2570	3400	2850	2950	2810
5	1090	1100	2600	2110	2800	3180	2630	2630	3210	2970	2880	2830
6	1190	1190	2490	2340	3060	3380	2820	2730	3120	2890	3000	2830
7	1190	1190	2550	2410	2760	3440	2790	2720	3010	2930	2950	2840
8	1260	1430	2620	2480	2880	3230	2540	2670	3180	3030	2890	2710
9	1200	1440	3490	2360	2950	3110	2800	2590	3020	2950	---	2620
10	1220	1420	3590	2280	2870	3360	2870	2570	3180	2920	2720	2730
11	1180	1370	3520	2220	3010	3120	2860	2670	3240	2960	2730	2800
12	1180	1360	3190	2310	3080	3260	2730	2650	3130	3290	2760	3160
13	1180	1470	3740	2300	3070	3190	2690	2560	3310	3250	2720	3280
14	1190	1680	3060	2140	3000	3110	2720	2640	3160	3270	2680	3300
15	1070	1630	2590	2150	2760	3200	2520	2630	3060	3360	2680	3190
16	1240	1600	3070	2300	3110	2850	2580	2550	2930	3170	2740	3150
17	1240	1700	2860	2640	3220	2610	2530	2610	2900	3310	2890	3250
18	1200	1620	2840	2590	3050	2850	2500	2580	3170	2950	2910	3340
19	1160	1710	2300	2340	3140	2870	2550	2610	3050	2960	2890	3050
20	685	1740	1920	2420	3380	3020	2460	2610	3190	3660	2830	3060
21	1000	1950	1900	2270	3410	3650	2400	2480	3040	3040	2880	3070
22	1140	2020	1880	2040	3350	2790	2470	2660	2840	2890	2880	2930
23	1140	1910	1850	2480	3240	2940	2560	2590	2850	2960	2860	2930
24	1170	1870	1920	2610	3250	2870	2490	2610	3020	3000	2890	2970
25	1160	2020	1960	2590	3350	2830	2390	2500	3040	29900	2730	2970
26	1140	2150	1880	2730	3360	3060	2430	2540	2890	2910	2870	2690
27	990	2270	1960	2760	3340	3140	2440	2730	3100	2880	2870	2920
28	1360	3470	1910	2630	3650	2910	2600	2620	---	2790	2920	2810
29	1430	3230	1900	2710	3580	2830	2530	2640	---	2910	2850	2780
30	1150	3160	1760	2750	---	2650	2530	2750	3240	2850	2990	2770
31	1160	---	1770	3020	---	2790	---	2790	---	2960	2700	---
MONTH	1150	1740	2480	2370	3100	3100	2620	2600	3120	3900	2850	2950

TEMPERATURE (°C) OF WATER, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.5	---	8.0	---	3.5	8.5	13.0	20.5	22.0	---	---	25.0
2	21.5	---	7.0	---	2.5	6.0	15.0	19.5	22.5	---	31.0	23.5
3	21.5	---	9.0	---	2.5	6.0	14.5	19.5	24.0	---	---	22.5
4	21.5	16.5	7.5	---	2.0	7.5	13.5	19.0	---	---	---	23.5
5	21.0	16.0	---	---	2.5	8.0	16.0	20.0	---	25.5	---	24.5
6	21.5	15.5	7.0	---	3.5	9.5	18.0	18.5	---	23.0	---	24.0
7	20.0	---	7.0	6.5	1.5	11.5	17.5	17.5	---	23.5	---	25.0
8	20.5	---	7.5	5.5	3.0	8.5	15.0	17.5	---	23.0	---	25.0
9	20.0	---	7.0	6.5	3.0	9.5	15.0	19.0	22.5	25.0	---	24.5
10	20.0	---	6.5	6.0	4.0	10.0	16.5	19.0	22.5	26.0	26.0	25.5
11	20.5	---	6.5	5.5	2.0	14.5	19.0	19.5	23.0	25.0	26.0	25.0
12	21.0	---	6.0	6.0	2.5	15.0	20.0	19.0	23.0	24.0	26.0	25.0
13	20.0	---	5.5	4.5	4.0	12.5	20.0	20.5	23.0	25.5	26.5	25.0
14	20.0	---	7.0	3.0	10.0	12.5	20.5	20.0	22.5	26.0	27.0	24.0
15	20.5	---	7.0	2.0	---	11.0	18.0	21.0	23.0	26.0	26.5	---
16	20.5	---	6.0	2.0	---	11.0	19.0	21.0	22.5	27.0	26.0	25.0
17	21.0	---	6.0	3.5	---	11.5	19.0	21.5	23.5	26.0	27.5	25.0
18	21.0	---	6.0	6.0	---	13.5	19.5	21.0	23.5	---	26.5	25.5
19	20.5	---	6.0	5.5	---	14.5	20.5	20.5	23.0	---	26.5	26.5
20	18.5	---	6.0	4.5	---	13.5	19.0	22.0	25.0	---	27.0	25.5
21	20.0	---	6.0	4.0	---	14.0	17.5	23.5	---	23.0	26.5	22.5
22	20.0	---	5.5	4.5	---	14.5	19.5	22.0	---	26.5	25.5	21.5
23	19.0	10.0	---	5.0	---	14.5	19.5	21.5	---	27.0	26.0	22.5
24	20.0	10.0	---	4.5	6.0	12.0	18.5	22.0	---	26.5	25.5	24.0
25	19.5	10.0	---	3.0	5.5	14.5	17.0	22.5	---	27.0	25.0	24.5
26	19.5	10.0	---	3.5	7.0	15.5	15.0	22.0	---	27.0	25.5	23.5
27	19.0	9.5	---	2.0	8.0	15.5	16.0	22.0	---	27.0	26.0	24.0
28	19.5	9.0	---	1.5	7.5	11.5	20.0	22.5	---	26.5	25.5	24.5
29	19.5	8.0	---	2.5	10.5	12.5	18.0	21.5	---	26.5	25.0	21.5
30	---	8.0	---	3.0	---	12.5	21.0	21.0	---	27.0	23.5	20.0
31	---	---	---	3.0	---	13.0	---	22.0	---	27.0	23.5	---
MONTH	20.5	---	---	4.0	---	12.0	17.5	20.5	---	---	---	24.0

07164400 ARKANSAS RIVER AT SAND SPRINGS, OKLA.--Continued

DISSOLVED SULFATE (SO_4), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	79	98	86	130	170	110	99	160	150	140	130
2	75	77	110	86	120	150	120	97	160	130	130	130
3	71	76	110	87	110	170	130	110	160	130	130	130
4	72	75	100	86	130	160	120	110	160	130	130	120
5	74	74	110	88	120	150	110	110	150	130	130	130
6	80	80	110	97	140	160	130	120	140	130	140	130
7	80	80	110	100	120	160	120	120	160	130	130	130
8	81	82	110	110	130	150	110	120	150	140	130	120
9	80	82	160	98	130	140	120	110	140	130	---	110
10	80	82	170	94	130	160	130	110	150	130	120	120
11	80	82	170	90	140	140	130	120	150	130	120	120
12	80	82	150	95	140	150	120	120	140	150	120	150
13	80	83	180	95	140	150	120	110	150	150	120	150
14	80	84	140	88	140	140	120	110	150	150	120	150
15	72	84	110	89	120	150	110	110	140	160	120	150
16	81	84	140	95	140	130	110	110	130	150	120	140
17	81	85	130	110	150	110	110	110	130	150	130	150
18	80	84	130	110	140	130	110	110	150	130	130	160
19	79	85	95	97	140	130	110	110	140	130	130	140
20	66	85	87	100	160	140	100	110	150	170	130	140
21	67	87	86	93	160	170	100	110	140	140	130	140
22	77	87	86	88	160	120	110	120	130	130	130	130
23	77	86	86	110	150	130	110	110	130	130	130	130
24	79	86	87	110	150	130	110	110	140	140	130	130
25	79	87	87	110	160	130	100	110	140	---	120	130
26	77	89	86	120	160	140	100	110	130	130	130	120
27	66	93	87	120	160	140	100	120	140	130	130	130
28	82	160	86	110	170	130	110	110	---	120	130	120
29	82	150	86	120	170	130	110	110	---	130	130	120
30	78	150	85	120	---	120	110	120	150	130	140	120
31	78	---	85	140	---	120	---	120	---	130	120	---
MONTH	76	90	110	100	140	140	110	110	140	140	130	130

DISSOLVED SULFATE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1260	218	1660	700	1420	572	379	376	681	806	1590	360
2	1310	949	784	425	1180	357	278	301	827	393	1080	527
3	1230	967	1000	806	1150	1060	557	352	540	497	1350	335
4	1250	878	580	830	1410	491	146	373	432	403	1030	413
5	754	986	268	1450	768	321	406	427	1150	844	800	522
6	809	1250	837	862	370	458	462	362	1460	508	577	535
7	774	1260	1100	1650	1070	425	661	230	1700	400	1150	636
8	813	1310	740	1050	994	383	663	540	1600	488	870	1180
9	784	1130	1230	1630	711	386	322	632	1350	583	---	1190
10	731	1310	2300	1580	452	1130	476	981	1020	829	588	853
11	553	856	2880	1530	921	322	896	1050	407	1010	507	765
12	639	705	632	1640	540	385	888	1280	917	1040	518	882
13	637	419	1770	1150	347	338	887	867	1150	893	360	1440
14	605	185	1820	984	420	390	820	420	882	847	542	964
15	375	1210	2830	904	317	1390	610	658	1050	721	526	1200
16	361	1400	2570	422	512	1490	356	1340	1200	338	467	1190
17	182	1430	2870	986	435	1140	479	1580	884	1290	529	1160
18	333	1400	4150	1050	359	643	612	1870	403	1610	474	1330
19	628	818	3120	1640	365	376	510	2220	1030	1430	588	1320
20	660	392	2850	720	385	435	390	1830	2080	2500	464	1110
21	687	166	2870	706	405	644	315	954	1690	2390	634	786
22	716	687	2750	385	504	455	281	1220	908	1100	416	705
23	408	1420	1610	224	511	377	233	1070	786	585	546	361
24	253	1420	1570	889	1050	372	212	1060	888	1820	633	336
25	263	1460	1540	1180	1310	352	759	1050	1020	---	572	454
26	691	1590	1500	1280	285	375	237	1030	1980	1820	341	751
27	607	2150	1520	1380	391	445	263	820	590	2240	321	689
28	705	3380	847	950	1260	463	394	404	---	1460	461	470
29	233	2500	793	758	962	979	258	578	---	850	550	559
30	227	2430	1530	168	---	263	258	708	415	335	440	412
31	168	---	833	1260	---	419	---	901	---	908	662	---
MONTH	634	1210	1720	1000	717	569	467	867	1030	1030	679	780

07164400 ARKANSAS RIVER AT SAND SPRINGS, OKLA.--Continued

DISSOLVED CHLORIDE (CL), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	240	260	590	440	780	970	680	600	900	860	810	760
2	250	260	660	430	710	850	710	590	930	750	760	740
3	230	250	640	480	680	960	770	650	900	750	780	750
4	240	250	620	440	770	920	720	660	910	750	780	730
5	240	250	670	520	730	850	680	680	860	780	760	740
6	270	270	640	590	810	910	740	710	830	760	790	740
7	270	270	650	610	720	930	730	710	800	770	780	740
8	280	330	680	630	760	860	650	690	850	800	760	700
9	270	330	940	600	780	830	730	670	800	780	---	680
10	270	320	970	570	750	900	750	660	850	770	710	710
11	270	310	950	550	800	830	750	690	870	780	710	730
12	270	310	850	580	820	870	710	690	830	880	720	840
13	270	340	1000	580	810	850	700	660	890	870	710	880
14	270	390	810	530	790	830	710	680	840	870	690	880
15	240	370	670	530	720	850	650	680	810	900	690	850
16	280	370	810	580	830	750	660	650	770	840	710	840
17	280	400	750	680	860	670	650	670	760	890	760	870
18	270	370	740	670	810	750	640	660	840	780	760	900
19	260	400	580	590	830	750	650	670	810	780	760	810
20	150	410	460	620	910	800	630	670	850	990	740	810
21	220	470	460	570	920	990	610	630	800	800	760	810
22	260	490	450	500	900	730	630	690	740	760	760	770
23	260	460	440	630	870	770	660	670	750	780	750	770
24	260	450	460	781	981	861	640	670	800	790	760	780
25	260	490	480	670	980	740	610	640	800	---	710	780
26	260	530	450	710	980	810	620	650	760	760	750	700
27	220	570	480	720	900	830	620	710	820	760	750	770
28	310	940	460	680	990	760	670	680	---	730	770	730
29	330	860	460	700	970	740	650	680	---	760	750	720
30	260	840	410	720	---	690	650	720	870	750	790	720
31	260	---	420	800	---	730	---	730	---	780	700	---
MONTH	260	420	630	600	820	820	670	670	830	800	750	780

DISSOLVED CHLORIDE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4170	723	10060	3570	8350	3280	2260	2280	3930	4680	9270	2120
2	4320	3140	4690	2130	6980	2080	2751	2941	5871	2310	11080	3110
3	4080	3200	6020	4450	6850	6110	3270	2110	3120	2920	7920	1970
4	4120	2900	3500	4260	8250	2830	865	2230	2490	2380	6020	2440
5	2490	3260	1600	8530	4540	1870	2420	2550	6700	4940	4710	3080
6	2700	4160	5030	5240	2160	2650	2720	2140	8520	2990	3380	3160
7	2580	4190	6610	5960	6300	2450	3910	1370	9950	2350	6730	3750
8	2860	5200	4420	6290	5850	2220	3970	3210	9280	2850	5120	7010
9	3741	4480	7060	9900	4170	2250	1900	3780	7900	3420	---	7100
10	2500	5150	13190	9640	2660	6500	2800	5870	5940	4870	3490	5060
11	1830	3250	16570	9390	5380	1880	5280	6230	2360	5890	3010	4520
12	2120	2660	3670	10010	3150	2230	5270	7640	5340	6010	3060	5130
13	2110	1700	10100	6990	2030	1960	6381	4111	7741	5180	2140	8310
14	2020	855	10600	5890	2460	2270	4860	2500	5130	4910	3220	5580
15	1240	5400	16900	5430	1880	8080	3660	3920	6140	4160	3130	6970
16	1250	6130	14970	2580	2990	8800	2110	8000	7030	1970	2770	6890
17	630	6700	16900	5870	2530	6830	2870	9410	5200	7460	3110	6750
18	1120	6210	24470	6280	2180	3790	3680	11160	2350	9430	2790	7710
19	2080	3850	19050	9950	2120	2210	3060	13220	6010	8370	3460	7690
20	2160	1880	15230	4350	2220	2540	2350	8540	11610	14280	2740	6470
21	2270	901	15150	4320	2340	3690	1910	5740	9900	13980	3730	4590
22	2370	3870	14340	2200	2910	2690	1690	7240	5350	6470	2450	4140
23	1350	7530	8290	1350	2960	2210	1400	6390	4630	3430	3210	2120
24	836	7380	8390	5070	6090	2190	2381	7451	6211	10660	3720	1970
25	870	8250	8410	7040	7570	2080	4600	6330	5950	---	3390	2660
26	2290	9560	7830	7580	1650	2190	1430	6190	11620	10710	2010	4460
27	2000	13140	8330	8150	2260	2590	1590	4860	3440	13190	1890	3810
28	2660	19830	4500	5060	7240	2720	2350	2410	---	8600	2590	2770
31	133	14520	4190	4500	5520	5770	1550	3440	---	4990	3240	3310
30	751	14160	7420	997	---	1560	1550	4190	2400	1980	2580	2430
31	557	---	4070	7340	---	2480	---	5320	---	5560	3930	---
MONTH	2130	5790	9730	5970	4190	3320	2780	5180	6030	6030	4000	4570

07164400 ARKANSAS RIVER AT SAND SPRINGS, OKLA.--Continued

DISSOLVED SOLIDS, IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	610	655	1340	1040	1700	2080	1500	1350	1950	1860	1760	1670
2	627	644	1470	1020	1560	1840	1570	1330	2000	1650	1670	1630
3	593	638	1430	1120	1510	2050	1680	1450	1930	1650	1710	1650
4	605	627	1390	1050	1690	1980	1580	1470	1970	1640	1700	1610
5	616	622	1490	1200	1610	1830	1510	1510	1850	1710	1660	1630
6	672	672	1420	1330	1760	1950	1620	1570	1800	1660	1730	1630
7	672	672	1460	1370	1580	1990	1600	1560	1730	1680	1700	1630
8	712	808	1500	1420	1660	1860	1450	1530	1830	1740	1660	1550
9	678	814	2020	1340	1700	1790	1610	1480	1740	1700	---	1500
10	689	802	2080	1300	1650	1940	1650	1470	1830	1680	1560	1570
11	667	774	2040	1260	1730	1800	1640	1530	1870	1700	1570	1610
12	667	768	1840	1310	1770	1880	1570	1520	1800	1900	1580	1820
13	667	831	2170	1310	1770	1840	1540	1460	1910	1880	1560	1890
14	672	949	1760	1210	1730	1790	1560	1510	1820	1890	1540	1910
15	605	921	1680	1220	1580	1850	1440	1510	1760	1940	1540	1840
16	701	904	1770	1310	1790	1640	1480	1460	1680	1830	1570	1820
17	701	961	1640	1510	1860	1490	1450	1490	1670	1910	1660	1880
18	678	915	1630	1480	1760	1640	1430	1480	1830	1700	1670	1930
19	655	966	1310	1330	1810	1650	1460	1490	1760	1700	1660	1760
20	387	983	1080	1380	1950	1740	1400	1490	1840	2120	1630	1760
21	565	1100	1070	1290	1970	2110	1370	1420	1750	1750	1660	1770
22	644	1140	1060	1150	1940	1600	1410	1520	1630	1660	1660	1680
23	644	1080	1050	1420	1870	1690	1460	1480	1640	1700	1640	1680
24	661	1060	1080	1490	1880	1650	1420	1490	1740	1730	1660	1710
25	655	1140	1110	1480	1940	1630	1360	1430	1750	---	1570	1710
26	644	1220	1060	1570	1940	1760	1390	1450	1660	1670	1650	1540
27	559	1290	1110	1580	1930	1810	1390	1570	1790	1660	1650	1680
28	768	2010	1080	1510	2110	1670	1490	1500	---	1600	1680	1610
29	808	1860	1070	1550	2070	1630	1450	1510	---	1670	1640	1600
30	650	1820	994	1580	---	1520	1450	1580	1870	1640	1720	1590
31	655	---	1000	1740	---	1600	---	1600	---	1700	1550	---
MONTH	649	988	1420	1350	1790	1780	1500	1490	1800	1740	1640	1690

DISSOLVED SOLIDS (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10580	1820	22700	8480	18250	7020	5020	5140	8470	10120	20180	8640
2	10920	7930	10440	5080	15410	4500	3630	4140	10240	5080	24260	6830
3	10360	8080	13440	10360	15190	13090	7160	4710	6720	6410	17300	8330
4	10460	7350	7860	10100	18030	6090	1910	4960	5360	5220	13150	5360
5	6320	8260	3560	19600	9980	4050	5370	5650	14500	10800	10320	6760
6	6790	10470	11250	11840	4700	5700	5990	4730	18500	6550	7370	6930
7	6500	10550	14720	22380	13890	5260	8600	3020	21710	5140	14710	8240
8	7170	12910	9820	14070	12830	4800	8860	7100	20110	6220	11210	15480
9	6630	11140	15150	22330	9120	4890	4190	8400	17230	7470	---	15750
10	6270	12800	28230	21850	5830	14000	6140	13060	12880	10650	7710	11160
11	4610	8110	35530	21390	11740	4070	11580	13800	5100	12870	6640	9940
12	5330	6640	7950	22650	6850	4830	11620	16930	11590	12980	6760	11120
13	5310	4220	21540	15830	4410	4250	11660	8890	14300	11190	4720	17950
14	5080	2080	23080	13500	5360	4940	10740	5550	11120	10600	7130	12040
15	3150	13300	37570	12450	4130	17490	8170	8700	13370	8960	6920	15100
16	3140	15130	32560	5830	6480	19320	4700	17830	15380	4260	6110	14960
17	1580	16290	37090	13020	5470	15170	6400	20890	11390	16100	6820	14590
18	2820	15320	53730	13970	4560	8310	8210	24830	5080	20620	6100	16620
19	5240	9340	43120	22460	4610	4850	6810	29370	13090	18300	7580	16740
20	5770	4540	35730	9770	4780	5540	5270	18960	25140	30520	6010	14090
21	5800	2110	35650	9800	5620	7080	4290	12850	21550	30440	8180	9980
22	5980	8970	33840	5080	6270	5920	3790	16050	11760	14170	5360	9050
23	3410	17690	19640	3010	6410	4840	3110	14210	10170	7490	7050	4640
24	2110	17430	19680	11250	13170	4810	2850	14080	11310	23260	8160	4300
25	2190	19120	19610	15650	16300	4560	10340	14150	12950	---	7480	5810
26	5770	21900	18470	16740	3550	4760	3210	13800	25470	23440	8400	9870
27	5120	29810	19430	17960	8880	5620	3560	10740	7480	28910	4140	8340
28	6640	41730	10580	12560	15470	5960	5220	5350	---	18940	5670	6100
29	2290	31400	9850	9940	11810	12680	3460	7630	---	10930	7120	7280
30	1890	30700	17830	2200	---	3470	3460	9240	5200	4340	5620	5360
31	1410	---	9770	16000	---	5450	---	11720	---	12140	8690	---
MONTH	5380	13570	21920	13460	9120	7230	6180	11500	13110	13140	8760	9980

07171400 VERDIGRIS RIVER NEAR OOLOGAH, OKLA.

LOCATION.--Lat 36°25'17", long 95°41'01", in NW1/4 sec.2, T.22 N., R.15 E., Rogers County, at gaging station, 0.3 mi (0.5 km) downstream from Oologah Dam, 1.2 mi (1.9 km) upstream from Fourmile Creek, 2.0 mi (3.2 km) southeast of Oologah and at mile 90.0 (144.8 km).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SODIUM (NA) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)
OCT.								
06...	1.4	140	96	0	730	200	6.6	1510
26...	11600	--	--	--	--	--	--	--
NOV.								
17...	230	21	150	0	27	32	.40	225
DEC.								
01...	820	--	--	--	--	--	--	--
20...	24600	18	136	0	27	26	1.1	200
FEB.								
02...	550	--	--	--	--	--	--	--
16...	550	16	118	0	31	26	.10	180
MAR.								
01...	2170	17	128	0	33	26	.20	215
14...	102	--	--	--	--	--	--	--
29...	163	--	--	--	--	--	--	--
APR.								
14...	34	--	--	--	--	--	--	--
25...	169	38	136	0	120	55	.10	430
MAY								
10...	29	30	148	0	88	67	5.2	350
24...	29	--	--	--	--	--	--	--
JUNE								
07...	33	--	--	--	--	--	--	--
21...	163	28	168	0	37	43	.03	279
JULY								
10...	32	27	178	0	37	66	1.0	296
21...	1070	30	176	0	42	48	2.9	293
AUG.								
03...	5300	29	176	0	37	48	.03	303
17...	70	--	--	--	--	--	--	--
29...	70	--	--	--	--	--	--	--
SEP.								
12...	70	28	168	0	34	60	.40	270
26...	970	--	--	--	--	--	--	--

07171400 VERDIGRIS RIVER NEAR OOLOGAH, OKLA.

DRAINAGE AREA.--4,339 sq mi (11,238.0 km²).

PERIOD OF RECORD.--Chemical analyses: October 1964 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.							
06...	2.05	5.71	810	731	2.1	1970	7.7
26...	--	--	--	--	--	443	--
NOV.							
17...	.31	180	150	27	.7	390	8.2
DEC.							
01...	--	--	--	--	--	388	--
20...	.27	13300	160	28	.7	352	8.0
FEB.							
02...	--	--	--	--	--	320	--
16...	.26	279	130	33	.6	320	7.8
MAR.							
01...	.29	1260	130	28	.6	367	7.0
10...	--	--	--	--	--	370	--
29...	--	--	--	--	--	302	--
APR.							
10...	--	--	--	--	--	696	--
25...	.56	173	240	130	1.0	628	7.6
MAY							
10...	.49	28.0	200	79	1.0	570	7.6
24...	--	--	--	--	--	671	--
JUNE							
07...	--	--	--	--	--	970	--
21...	.38	123	180	42	.8	676	7.8
JULY							
10...	.43	25.6	180	36	.5	480	8.1
21...	.43	840	190	46	.6	510	7.7
AUG.							
11...	.38	6120	190	47	.9	696	7.2
17...	--	--	--	--	--	690	--
24...	--	--	--	--	--	680	--
SEP.							
12...	.37	55.0	180	42	.6	676	7.8
28...	--	--	--	--	--	673	--

07175500 CANEY RIVER NEAR RAMONA, OKLA.

LOCATION.--Lat 36°30'31", long 95°50'36", in NE1/4NW1/4 sec.5, T.23 N., R.14 E., Washington County, at gaging station at bridge on county road 1.0 mi (1.6 km) upstream from Buck Creek, 2.2 mi (3.5 km) downstream from Double Creek, 4.5 mi (7.2 km) southeast of Ramona, and at mile 32.0 (51.5 km).

DRAINAGE AREA.--1,955 sq mi (5,063.4 km²).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
OCT.								
05...	99	34	142	0	23	59	2.4	274
15...	61	32	126	6	20	56	.50	247
25...	4200	24	88	0	16	41	3.0	187
NOV.								
05...	178	50	152	0	27	96	1.9	385
15...	83	71	172	0	33	140	3.2	504
25...	264	70	152	0	35	140	3.0	473
DEC.								
05...	250	97	136	4	29	200	.50	554
15...	10000	17	58	0	19	29	2.0	130
25...	2530	23	152	0	21	41	1.9	240
JAN.								
05...	850	34	146	0	24	63	2.3	301
15...	502	68	170	0	32	98	2.4	407
25...	244	67	188	0	38	140	3.5	496
FEB.								
05...	168	70	168	10	38	140	1.6	482
15...	231	77	196	0	41	160	3.3	554
25...	182	92	200	0	46	190	3.1	620
MAR.								
05...	111	78	204	0	40	150	2.4	558
15...	90	100	206	0	46	220	3.9	664
25...	85	99	176	0	44	210	2.7	630
APR.								
05...	93	100	190	0	39	220	1.6	620
15...	70	100	210	0	47	200	3.3	646
25...	845	46	150	0	35	90	2.7	345
MAY								
05...	1170	32	188	0	30	97	2.0	312
15...	267	68	200	0	36	89	2.1	378
25...	70	90	192	0	38	119	1.9	405
JUNE								
05...	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]
15...	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]
25...	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]
JULY								
05...	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]
15...	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]
25...	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]
AUG.								
05...	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]
15...	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]
25...	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]
SEP.								
05...	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]
15...	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]
25...	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]

07175500 CANEY RIVER NEAR RAMONA, OKLA.

PERIOD OF RECORD.--Chemical analyses: November 1951 to August 1953, October 1959 to August 1962, October 1964 to current year.
Water temperatures: October 966 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVD SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.							
05...	.7	73.2	150	34	1.2	460	7.8
15...	.8	40.7	130	20	1.2	430	8.6
25...	.5	2120	96	24	1.1	318	7.0
NOV.							
05...	.2	185	180	55	1.6	608	7.8
15...	.9	113	220	79	2.1	797	8.1
25...	.4	337	210	85	2.1	772	7.9
DEC.							
05...	.5	374	220	100	2.8	906	8.4
15...	.9	4020	70	22	.9	222	7.4
25...	.3	1680	160	35	.8	399	7.9
JAN.							
05...	.1	691	160	40	1.2	481	7.4
15...	.5	552	200	61	1.5	640	7.6
25...	.7	327	240	86	1.9	803	7.7
FEB.							
05...	.6	219	240	86	2.0	815	8.7
15...	.5	346	260	99	2.1	896	7.8
25...	.8	305	280	116	2.4	997	7.8
MAR.							
05...	.6	167	270	100	2.1	888	7.9
15...	.0	161	300	130	2.5	1070	7.8
25...	.6	165	270	130	2.6	1020	7.7
APR.							
05...	.5	84.2	280	120	2.6	1050	7.9
15...	.8	122	300	130	2.5	1090	7.7
25...	.7	596	170	47	1.5	560	7.7
MAY							
05...	.2	486	190	38	1.0	522	7.9
15...	.1	303	230	59	1.4	657	8.0
25...	.5	85.3	230	72	1.6	707	7.8
JUNE							
05...	.3	66.0	260	76	1.7	740	8.1
15...	.5	53.8	270	86	1.7	818	8.1
25...	.7	32.1	280	91	2.2	888	8.0
JULY							
05...	.0	307	110	08	1.3	361	8.0
15...	.4	66.1	210	92	2.2	740	8.1
25...	.1	1300	150	20	.8	300	7.0
AUG.							
05...	.6	43.0	170	37	1.0	478	7.2
15...	.9	15.4	180	39	1.0	506	7.2
25...	.1	86.0	190	61	1.2	568	7.5
SEP.							
05...	.7	111	200	00	1.4	600	7.1
15...	.6	90.5	200	62	1.9	738	7.6
25...	.1	35.2	120	44	1.2	502	7.0

07175500 CANEY RIVER NEAR RAMONA, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	437	470	1110	448	815	903	1030	614	766	1110	430	660
2	462	491	930	415	811	897	983	320	766	594	439	666
3	478	549	920	432	846	904	1010	581	776	397	436	687
4	481	633	911	445	863	895	1040	520	795	415	450	749
5	456	602	906	480	847	899	1050	524	806	361	469	680
6	480	625	800	530	866	901	1070	549	800	401	470	732
7	440	635	650	553	843	909	1060	574	811	501	477	745
8	445	646	632	589	845	928	1070	608	811	543	481	825
9	452	681	649	612	862	921	1080	664	820	519	479	780
10	464	735	369	660	864	929	1070	687	820	560	470	756
11	477	767	535	684	873	939	1070	602	826	605	470	749
12	473	776	565	691	885	962	1070	636	836	629	474	748
13	458	836	681	708	884	983	1070	586	841	675	490	769
14	458	817	526	701	886	1030	1130	599	837	725	496	743
15	464	798	221	648	910	1080	1100	661	835	788	504	738
16	472	824	179	651	1020	1100	1110	675	857	802	518	724
17	482	846	196	635	1060	1100	1110	676	872	846	518	720
18	492	862	262	640	1100	1080	1200	694	876	864	523	717
19	495	808	304	713	1130	1080	1190	720	845	908	531	710
20	114	910	362	745	1000	1070	1520	789	880	934	541	711
21	192	955	438	917	953	1030	503	742	882	303	543	708
22	204	950	393	849	966	1060	628	627	897	402	536	---
23	235	942	399	853	986	1060	521	572	908	441	548	451
24	284	969	397	816	1100	1040	586	664	925	427	544	314
25	316	773	398	810	1000	1020	567	710	952	399	543	392
26	348	814	392	816	956	1030	566	730	983	374	552	428
27	374	1000	393	810	923	1060	590	766	992	359	564	320
28	424	940	398	812	914	1100	622	737	1000	381	593	338
29	442	977	429	806	890	1100	688	728	1010	398	615	408
30	427	1100	342	817	---	1070	672	711	1010	422	630	303
31	427	---	440	812	---	1060	---	764	---	440	---	---
MONTH	408	794	520	681	927	1000	933	648	868	565	511	630

07175500 CANEY RIVER NEAR RAMONA, OKLA.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.0	18.0	8.0	9.0	5.0	12.0	12.0	19.0	25.0	26.0	27.0	26.0
2	25.0	18.0	8.0	9.0	5.0	13.0	18.0	18.0	26.0	26.0	28.0	24.0
3	23.0	17.0	8.0	9.0	4.0	10.0	14.0	18.0	26.0	28.0	30.0	23.0
4	24.0	16.0	8.0	6.0	4.0	12.0	14.0	18.0	25.0	28.0	27.0	23.0
5	24.0	17.0	8.0	5.0	4.0	10.0	16.0	18.0	27.0	23.0	28.0	26.0
6	23.0	16.0	8.0	5.0	4.0	12.0	18.0	19.0	25.0	23.0	29.0	25.0
7	23.0	14.0	8.0	5.0	6.0	11.0	18.0	18.0	26.0	25.0	28.0	24.0
8	21.0	12.0	9.0	5.0	6.0	11.0	15.0	13.0	30.0	23.0	25.0	26.0
9	20.0	12.0	9.0	5.0	6.0	15.0	16.0	17.0	27.0	24.0	29.0	25.0
10	18.0	13.0	9.0	6.0	4.0	12.0	13.0	18.0	29.0	28.0	30.0	25.0
11	21.0	13.0	8.0	6.0	5.0	14.0	18.0	18.0	30.0	30.0	28.0	30.0
12	18.0	15.0	9.0	7.0	5.0	12.0	20.0	19.0	25.0	25.0	31.0	30.0
13	21.0	16.0	8.0	6.0	5.0	15.0	21.0	19.0	28.0	28.0	26.0	28.0
14	23.0	16.0	9.0	5.0	7.0	18.0	26.0	20.0	28.0	26.0	28.0	31.0
15	20.0	16.0	11.0	3.0	7.0	16.0	22.0	19.0	27.0	30.0	26.0	25.0
16	20.0	18.0	10.0	5.0	7.0	16.0	20.0	23.0	25.0	32.0	28.0	30.0
17	21.0	17.0	9.0	5.0	10.0	11.0	21.0	22.0	30.0	32.0	28.0	25.0
18	22.0	15.0	9.0	8.0	8.0	16.0	23.0	23.0	26.0	29.0	28.0	26.0
19	21.0	13.0	9.0	5.0	9.0	16.0	22.0	19.0	25.0	30.0	33.0	29.0
20	18.0	13.0	6.0	7.0	9.0	17.0	21.0	23.0	25.0	28.0	28.0	26.0
21	18.0	15.0	8.0	6.0	8.0	17.0	18.0	24.0	30.0	26.0	32.0	23.0
22	18.0	11.0	8.0	8.0	9.0	18.0	19.0	25.0	24.0	26.0	28.0	23.0
23	18.0	11.0	8.0	7.0	9.0	14.0	19.0	24.0	25.0	28.0	31.0	22.0
24	18.0	10.0	9.0	8.0	9.0	16.0	19.0	24.0	25.0	29.0	28.0	23.0
25	18.0	10.0	10.0	7.0	10.0	16.0	12.0	24.0	27.0	30.0	26.0	24.0
26	18.0	10.0	12.0	7.0	10.0	15.0	16.0	25.0	30.0	29.0	25.0	23.0
27	19.0	10.0	11.0	5.0	10.0	16.0	15.0	29.0	32.0	29.0	28.0	21.0
28	18.0	10.0	10.0	3.0	11.0	15.0	12.0	30.0	27.0	28.0	26.0	23.0
29	20.0	9.0	10.0	9.0	12.0	13.0	12.0	25.0	28.0	28.0	26.0	20.0
30	20.0	9.0	12.0	5.0	---	15.0	13.0	23.0	32.0	29.0	25.0	20.0
31	18.0	---	10.0	6.0	---	16.0	---	22.0	---	30.0	24.0	---
MONTH	20.5	13.5	9.0	6.0	7.0	14.0	17.5	21.0	27.0	27.5	28.0	25.0

07177500 BIRD CREEK NEAR SPERRY, OKLA.

LOCATION.--Lat 36°16'42", long 95°57'14", in NW1/4NW1/4 sec.29, T.21 N., R.13 E., Tulsa County, at gaging station at bridge on county road, 1.5 mi (2.4 km) upstream from Delaware Creek, 2.4 mi (3.9 km) downstream from Hominy Creek, 2.5 mi (4.0 km) southeast of Sperry, and at mile 25.0 (40.2 km).

DRAINAGE AREA.--905 sq mi (2,344.0 km²).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTAN-TANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
OCT.								
05...	205	42	96	0	14	82	1.6	280
15...	250	70	148	0	20	140	1.7	441
25...	2950	15	64	0	12	25	.40	131
NOV.								
05...	129	55	116	2	24	110	.20	341
15...	123	55	176	0	25	110	1.0	400
25...	162	67	200	0	26	130	1.1	450
DEC.								
05...	108	86	196	0	33	180	.10	554
15...	14300	8.7	29	0	13	15	1.4	105
25...	304	46	152	0	24	90	1.2	333
JAN.								
05...	287	50	130	0	28	90	.30	341
15...	106	60	178	0	32	120	1.8	416
25...	91	83	212	0	37	170	2.4	560
FEB.								
05...	51	100	224	0	44	200	.40	605
15...	98	120	220	0	43	250	1.5	717
24...	51	110	200	0	42	220	1.4	664
MAR.								
05...	40	130	216	0	44	260	.10	724
15...	94	170	240	0	45	350	2.0	938
24...	58	170	250	0	49	350	2.2	934
APR.								
05...	32	160	256	0	44	300	.20	836
15...	65	130	190	0	46	300	2.6	826
25...	129	96	104	0	31	110	2.3	368
MAY								
05...	110	86	132	0	30	130	3.0	392
15...	109	71	180	0	35	140	5.0	494
25...	91	58	130	0	21	110	2.2	395
JUNE								
05...	13	78	132	0	25	150	6.0	453
15...	6.0	110	170	0	26	210	6.3	888
30...	10	110	190	0	26	270	1.9	717
JULY								
05...	429	30	69	0	16	91	1.8	194
15...	20	48	130	0	25	90	.50	324
25...	53	64	164	0	23	140	.40	370
AUG.								
05...	12	75	128	0	17	150	1.1	407
15...	19	98	146	0	19	190	4.3	495
25...	17	150	186	0	25	200	1.3	668
SEP.								
05...	38	98	110	0	23	110	1.1	384
15...	28	80	98	0	18	140	1.3	610
25...	49	66	70	0	15	94	1.0	257

07177500 BIRD CREEK NEAR SPERRY, OKLA.

PERIOD OF RECORD.--Chemical analyses: October 1951 to September 1953, December 1959 to August 1962, October 1964 to current year.
Water temperatures: October 1951 to September 1953, October 1964 to September 1968.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.							
05...	.38	155	120	41	1.7	460	7.6
15...	.60	298	180	59	2.3	721	7.5
25...	.18	1040	64	11	.8	206	7.0
NOV.							
05...	.46	119	150	52	2.0	582	8.4
15...	.54	133	200	56	1.7	671	8.0
25...	.61	197	230	66	1.9	777	8.1
DEC.							
05...	.75	162	260	99	2.3	913	[illegible]
15...	.14	4050	38	14	.6	124	6.9
25...	.45	273	180	55	1.5	566	7.8
JAN.							
05...	.46	264	170	57	1.7	581	8.2
15...	.57	119	210	64	1.8	704	7.6
25...	.76	138	260	86	2.2	912	7.7
FEB.							
05...	.82	83.3	290	106	2.6	1050	8.3
15...	.98	190	320	149	2.9	1220	7.9
24...	.88	89.0	290	119	2.8	1120	7.9
MAR.							
05...	.98	78.0	320	140	3.2	1200	8.2
15...	1.28	238	390	190	3.7	1520	7.9
24...	1.27	146	390	190	3.7	1540	7.8
APR.							
05...	1.14	72.2	380	170	3.1	1410	8.0
15...	1.12	145	380	180	3.1	1320	7.7
25...	.50	128	150	65	1.9	581	7.5
MAY							
05...	.53	146	180	72	2.1	676	7.5
15...	.67	140	230	82	2.0	793	7.6
25...	.08	30.0	150	48	2.1	597	7.5
JUNE							
05...	.61	16.0	180	72	2.5	767	8.0
15...	.80	6.35	240	97	3.1	986	7.2
30...	.98	37.0	280	120	3.4	1210	7.2
JULY							
05...	.21	177	82	29	1.1	280	7.3
15...	.66	24.5	160	53	1.7	544	6.9
25...	.51	33.1	160	75	2.2	650	7.2
AUG.							
05...	.56	13.2	170	65	2.5	719	7.2
15...	.67	20.0	200	80	3.0	882	6.8
25...	.80	30.0	240	110	4.2	1210	7.1
SEP.							
05...	.67	36.2	190	94	2.1	905	8.0
15...	.56	31.0	180	68	2.0	706	8.9
25...	.35	34.0	100	36	1.9	438	8.5

07177500 BIRD CREEK NEAR SPERRY, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	378	500	918	542	997	1150	1380	520	647	1210	788	642
2	440	497	918	499	1010	1160	1380	508	648	1330	716	647
3	440	614	916	517	1040	1230	1350	588	665	134	718	637
4	372	614	944	526	1040	1230	1390	565	663	128	728	643
5	461	614	942	585	1080	1240	1410	674	749	254	719	595
6	421	614	952	617	1080	1250	---	620	796	---	728	609
7	421	656	957	639	1080	1240	1410	---	792	---	775	614
8	446	688	957	658	1060	1270	1470	659	812	---	758	617
9	447	644	408	660	1100	1320	1460	683	---	411	836	697
10	---	625	403	664	1130	---	1460	710	---	411	868	728
11	461	623	342	683	---	---	1450	702	901	452	877	849
12	563	623	344	674	1130	1310	1500	745	922	453	843	916
13	616	621	409	655	1130	1350	1480	744	937	546	847	702
14	687	636	406	709	1150	1420	---	786	957	529	874	688
15	729	659	122	709	1230	1550	1330	796	986	544	892	706
16	765	662	159	746	1080	1380	1330	785	1040	541	989	706
17	768	662	289	791	1060	1450	809	772	994	595	---	699
18	826	698	289	---	1060	1490	803	740	---	579	1000	685
19	873	737	336	878	1050	1440	832	719	---	599	1000	690
20	109	737	---	905	1050	1450	1080	---	---	517	946	693
21	143	878	468	885	1100	1480	520	452	---	---	989	868
22	261	876	470	885	1110	1530	636	559	---	---	986	---
23	185	1000	500	899	1110	1510	563	555	---	729	1260	---
24	185	770	536	908	1130	1560	561	574	---	746	1230	430
25	206	768	568	924	---	---	581	595	---	650	1210	438
26	285	768	597	927	1150	1430	594	589	---	660	1200	517
27	356	830	---	952	1150	1430	588	---	---	667	967	243
28	361	830	641	1090	1150	1470	---	---	---	662	1260	506
29	421	910	664	1010	1150	1420	---	680	---	676	849	585
30	422	910	483	1000	---	1450	542	708	1210	745	743	253
31	450	---	492	1020	---	---	---	857	---	758	668	---
MONTH	450	709	567	772	1100	1380	1070	662	---	597	909	629

07177500 BIRD CREEK NEAR SPERRY, OKLA.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.0	18.0	5.0	7.0	3.0	12.0	11.0	18.0	25.0	29.0	28.0	24.0
2	24.0	16.5	6.0	8.0	2.0	12.0	11.0	17.0	26.0	26.0	30.0	23.0
3	21.5	17.0	6.0	6.0	3.0	10.0	12.0	20.0	26.0	25.0	30.0	22.0
4	22.0	17.0	6.0	4.0	3.0	8.0	15.5	20.0	25.0	22.0	28.0	23.0
5	22.0	16.0	6.0	3.0	3.0	7.0	17.0	20.0	26.0	23.0	29.0	24.0
6	21.0	12.0	6.0	2.5	2.5	7.0	---	19.0	24.0	---	28.0	24.0
7	21.0	11.0	6.0	4.0	3.0	7.0	18.0	---	26.0	---	29.0	25.0
8	20.0	9.0	7.0	4.0	4.0	12.5	17.0	18.0	25.0	---	29.0	25.0
9	18.0	10.0	6.0	4.0	4.0	13.0	18.0	20.0	---	27.0	27.0	24.0
10	---	11.0	7.0	5.0	4.0	---	19.0	20.0	---	26.0	27.0	26.0
11	19.0	13.0	6.0	6.0	---	---	22.0	20.0	30.5	25.0	30.0	26.5
12	20.0	14.0	6.5	6.0	4.0	16.0	23.0	20.0	29.0	25.0	27.0	26.0
13	19.0	14.0	7.0	4.0	4.0	15.0	20.0	19.0	29.0	25.0	28.0	26.0
14	19.0	14.0	8.0	3.0	5.0	16.0	---	20.0	26.0	27.0	27.0	25.0
15	19.0	15.0	9.0	0.0	6.0	16.0	20.0	21.0	30.0	26.0	29.0	28.0
16	19.0	14.0	8.5	1.0	7.0	15.0	21.5	21.0	30.0	27.0	30.0	25.0
17	18.0	15.0	7.0	5.0	7.0	16.0	20.0	20.0	25.0	26.0	29.5	26.0
18	19.0	13.5	7.0	---	7.0	15.0	20.0	24.0	---	29.0	28.0	27.0
19	20.0	14.0	6.5	5.0	7.0	17.0	21.0	21.0	---	29.0	29.0	27.5
20	16.0	12.5	---	5.5	8.0	17.0	20.0	---	---	26.0	29.0	26.0
21	16.5	10.0	6.0	5.0	8.0	18.0	20.0	24.0	---	---	28.0	24.0
22	17.0	9.0	6.0	5.5	9.0	18.0	18.0	23.0	---	---	28.0	---
23	17.0	6.0	6.5	6.0	9.5	17.0	20.0	23.0	---	28.0	28.0	---
24	17.0	8.0	7.0	6.0	10.5	17.0	20.0	26.0	---	29.0	28.0	21.5
25	17.0	6.0	9.0	5.0	---	---	19.0	25.0	---	30.5	27.0	24.5
26	17.0	8.0	10.0	4.0	11.0	18.0	19.0	26.0	---	30.0	25.0	23.5
27	17.0	8.0	---	3.0	12.0	17.0	16.0	---	---	29.0	24.0	23.0
28	17.5	7.5	8.5	3.0	12.5	16.0	---	---	---	28.0	27.0	23.0
29	17.0	6.0	9.0	2.0	12.0	14.0	---	26.0	---	27.0	27.0	22.0
30	17.0	7.0	9.0	2.0	---	16.0	18.0	24.5	30.0	28.0	24.0	19.0
31	15.5	---	8.5	3.0	---	---	---	25.5	---	28.0	23.5	---
MONTH	19.0	12.0	7.0	4.5	6.5	14.0	18.5	22.0	---	27.0	28.0	24.5

07178050 BIRD CREEK NEAR CATOOSA, OKLA.

LOCATION.--Lat 36°13'51", long 95°40'55", Tulsa County, at bridge on U.S. Highway 75, approximately 5.5 mi (8.8 km) northwest of Catoosa.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)
OCT.							
08...	44	118	0	28	75	2.2	2.9
NOV.							
17...	60	164	0	42	110	12	4.7
DEC.							
01...	--	--	--	--	--	--	--
20...	37	116	0	33	68	1.8	.68
JAN.							
19...	78	180	0	60	130	15	4.6
FEB.							
02...	--	--	--	--	--	--	--
16...	120	192	0	65	230	16	5.0
29...	--	--	--	--	--	--	--
MAR.							
15...	110	184	0	76	190	33	10
APR.							
13...	82	170	0	75	150	22	9.4
25...	--	--	--	--	--	--	--
MAY							
09...	57	146	0	42	110	7.8	2.7
24...	--	--	--	--	--	--	--
JUNE							
06...	--	--	--	--	--	--	--
21...	60	130	0	41	100	37	20
JULY							
07...	--	--	--	--	--	--	--
18...	51	118	0	38	69	25	12
AUG.							
01...	--	--	--	--	--	--	--
17...	52	124	0	51	64	26	3.0
30...	--	--	--	--	--	--	--
SEP.							
12...	46	94	0	23	85	6.3	2.4
28...	--	--	--	--	--	--	--

07176600 VERDIGRIS RIVER NEAR INOLA, OKLA.

LOCATION.--Lat 36°09'43", long 95°3'07", in northwest corner sec.4, T.19 N., R.16 E., Rogers County, at gaging station at bridge on State Highway 33, 1.0 mi (1.6 km) upstream from Salt Creek, 6.0 mi (9.6 km) west of Inola, and at mile 48.8 (78.5 km).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)
OCT.							
[illegible]	27	110	0	29	40	3.7	.05
[illegible]	34	150	0	43	60	3.9	.52
[illegible]	27	98	10	29	33	.20	.08
NOV.							
[illegible]	30	102	4	29	50	.20	.01
[illegible]	36	160	0	37	64	2.7	.72
[illegible]	30	152	0	44	60	6.3	1.1
DEC.							
[illegible]	20	70	0	30	40	.01	.02
[illegible]	7.5	42	0	12	6.5	3.0	.35
[illegible]	18	120	0	25	27	2.4	.20

07178050 BIRD CREEK NEAR CATOOSA, OKLA.

DRAINAGE AREA.--1,080 sq mi (2,797.2 km²).

PERIOD OF RECORD.--Chemical analyses: October 1964 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.							
08...	313	.43	140	43	1.6	495	6.8
NOV.							
17...	433	.59	210	75	1.8	697	8.3
DEC.							
01...	--	--	--	--	--	842	--
20...	300	.41	140	45	1.4	459	7.0
JAN.							
19...	519	.71	240	92	2.2	829	8.2
FEB.							
02...	--	--	--	--	--	963	--
16...	727	.99	300	140	3.0	1150	8.1
29...	--	--	--	--	--	1060	--
MAR.							
15...	673	.92	280	130	2.9	1050	7.9
APR.							
13...	565	.77	270	130	2.2	898	7.8
25...	--	--	--	--	--	597	--
MAY							
09...	419	.57	190	70	1.8	664	7.7
24...	--	--	--	--	--	580	--
JUNE							
06...	--	--	--	--	--	705	--
21...	395	.54	190	83	1.9	632	7.7
JULY							
07...	--	--	--	--	--	356	--
18...	335	.46	140	43	1.9	550	7.8
AUG.							
01...	--	--	--	--	--	597	--
17...	308	.42	150	48	1.8	535	7.2
30...	--	--	--	--	--	740	--
SEP.							
12...	288	.39	120	43	1.8	488	7.2
28...	--	--	--	--	--	331	6.9

07178600 VERDIGRIS RIVER NEAR INOLA, OKLA.

DRAINAGE AREA.--7,911 sq mi (20,489.5 km²).

PERIOD OF RECORD.--Chemical analyses: October 1947 to current year. (discontinued)
Water temperatures: October 1950 to September 1965, October 1967 to current year. (discontinued)

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.							
05...	226	.31	110	22	1.1	333	6.8
15...	302	.41	150	48	1.2	462	7.0
25...	206	.28	110	13	1.1	315	8.9
NOV.							
05...	244	.33	120	33	1.2	386	8.6
15...	360	.47	180	69	1.2	535	8.1
25...	357	.49	190	55	1.2	552	8.6
DEC.							
05...	256	.35	120	60	1.5	437	8.9
15...	740	1.01	92	0	.5	120	6.8
25...	190	.26	120	22	.7	327	7.7

07178620 NEWT GRAHAM LOCK AND DAM NEAR INOLA, OKLA.

LOCATION.--Lat 36°03'33", long 95°32'12", NW1/4NE1/4 sec. 7, T.18 N., R. 17 E., Wagoner County, at lock wall at dam, 6.2 mi. (10.0 km), at 25.3 (40.7 km), and at mile 35.5 (57.1 km).

DRAINAGE AREA.--8,030 sq mi (20,797 km²).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)
DEC.							
10...	42	80	4	44	74	.20	.04
15...	18	118	0	28	27	3.2	.38
25...	18	120	0	26	28	2.5	.22
JAN.							
05...	23	72	12	26	42	.20	.01
15...	27	134	0	39	46	3.2	.50
25...	33	144	0	44	58	3.0	.43
FEB.							
05...	40	76	38	52	70	.90	.34
15...	39	152	0	52	70	4.8	1.0
25...	47	156	0	51	89	4.7	.88
MAR.							
05...	28	134	0	40	46	3.2	.20
15...	29	138	0	50	48	3.1	.37
25...	29	144	0	44	47	2.8	.36
APR.							
05...	48	170	0	62	89	5.1	1.1
15...	52	176	0	71	96	4.3	1.0
25...	68	178	0	61	130	4.6	.40
MAY							
05...	36	110	0	36	68	2.6	.23
15...	41	110	6	39	76	.20	.00
25...	42	126	10	45	73	2.9	.36
JUNE							
05...	44	184	0	44	82	2.0	.14
15...	46	182	0	48	87	1.6	.24
25...	48	184	0	53	91	.10	.05
JULY							
05...	27	84	0	21	50	.30	.13
15...	21	72	0	20	37	2.7	.29
25...	28	154	0	32	48	2.1	.30
AUG.							
05...	31	134	0	51	48	.10	.00
15...	32	174	0	40	50	.80	.13
23...	32	176	0	41	50	.60	.13
SEP.							
05...	32	176	0	42	50	.20	.12
15...	35	178	0	41	52	2.4	.80
25...	45	156	0	40	75	4.4	1.0

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	598	360	616	451	509	509	601	655	474	503
2	---	---	723	340	563	435	600	594	600	601	492	506
3	---	---	687	348	558	445	611	620	615	661	499	502
4	---	453	540	360	569	467	629	501	614	670	492	506
5	---	447	412	323	556	441	458	456	613	366	468	505
6	---	456	496	360	501	442	566	438	619	529	493	511
7	---	465	546	382	567	356	453	445	629	457	508	512
8	---	467	507	365	572	454	668	452	736	366	498	512
9	---	472	458	355	571	466	661	467	635	362	497	503
10	---	484	599	362	559	467	476	459	635	296	533	519
11	---	498	362	374	552	481	473	453	632	283	532	518
12	---	505	337	426	551	496	473	442	635	278	533	519
13	---	512	379	422	571	464	476	486	637	275	533	523
14	---	525	439	422	567	466	472	506	634	283	537	511
15	---	539	282	441	563	464	497	555	641	279	533	522
16	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
22	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
23	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
24	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
26	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
27	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
28	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
29	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
30	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
31	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

07178620 NEWT GRAHAM LOCK AND DAM NEAR INOLA, OKLA.

PERIOD OF RECORD.--Chemical analyses: December 1971 to current year.
Water temperatures: December 1971 to current year.

REMARKS.--Continuous monitor records for water temperature and specific conductance are collected for this station.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
DEC.							
10...	282	.38	130	58	1.6	475	8.7
15...	207	.28	120	23	.7	333	8.0
25...	206	.28	120	22	.7	333	7.9
JAN.							
05...	201	.27	110	31	1.0	323	9.2
15...	261	.35	150	40	1.0	436	7.9
25...	307	.42	170	52	1.1	503	8.0
FEB.							
05...	324	.44	190	64	1.3	548	9.2
15...	334	.45	190	65	1.2	548	7.7
25...	384	.52	210	82	1.4	619	7.6
MAR.							
05...	266	.36	160	50	1.0	441	7.8
15...	281	.38	170	57	1.0	464	7.9
25...	271	.37	170	52	1.0	458	8.1
APR.							
05...	414	.56	220	81	1.4	654	7.0
15...	432	.59	240	96	1.5	686	7.6
25...	459	.62	250	100	1.9	742	7.3
MAY							
05...	279	.38	160	50	1.3	464	8.0
15...	308	.42	160	60	1.4	499	8.6
25...	351	.48	170	50	1.4	576	8.8
JUNE							
05...	374	.51	210	59	1.3	617	7.3
15...	380	.52	220	71	1.3	639	7.6
25...	384	.52	220	69	1.4	648	8.3
JULY							
05...	205	.28	100	31	1.2	344	7.9
15...	168	.23	84	28	1.0	279	7.9
25...	278	.38	160	36	1.0	466	7.8
AUG.							
05...	271	.37	180	50	1.1	466	8.3
15...	298	.41	180	67	1.0	505	7.6
25...	291	.40	180	66	1.0	502	7.8
SEP.							
05...	296	.40	190	66	1.0	506	7.0
15...	309	.42	190	67	1.1	515	7.7
25...	360	.49	180	52	1.5	583	7.6

TEMPERATURE (°C) OF WATER, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]
8	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]
9	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]
10	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]
11	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]
12	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]
13	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]
14	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]
15	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]
16	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
22	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
23	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
24	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
26	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
27	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
28	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
29	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
30	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
31	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MONTH	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	---	[illegible]

DISSOLVED SULFATE (SO_4), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	50	30	51	37	49	49	50	54	39	42
2	---	---	60	28	45	36	50	49	50	57	41	42
3	---	---	57	29	46	37	51	50	51	55	41	42
4	---	38	45	30	47	37	52	48	51	56	41	42
5	---	37	34	27	46	37	55	38	51	29	39	42
6	---	38	41	31	48	37	45	36	51	44	41	42
7	---	39	45	32	47	30	54	39	52	38	42	42
8	---	39	42	30	47	38	55	38	61	30	41	42
9	---	39	38	29	47	39	55	39	53	28	41	42
10	---	40	33	30	46	39	56	38	53	25	42	43
11	---	41	28	31	46	40	56	38	52	23	42	43
12	---	42	28	35	46	41	56	37	53	23	42	43
13	---	42	31	35	47	39	56	40	53	23	42	43
14	---	44	34	35	47	39	56	42	53	23	42	42
15	---	45	23	37	47	39	58	46	53	23	42	43
16	---	45	14	38	46	38	60	43	52	24	41	43
17	---	45	14	39	47	36	63	44	53	24	41	43
18	---	48	17	39	47	37	64	44	53	24	41	43
19	---	48	25	39	48	38	63	53	53	24	41	43
20	---	47	29	39	46	39	65	45	53	24	41	42
21	---	44	29	39	47	38	66	47	53	23	41	43
22	---	45	30	41	49	39	74	48	53	38	41	42
23	---	45	30	41	48	38	70	47	54	39	42	44
24	---	46	31	41	55	38	70	48	53	44	41	54
25	---	46	28	42	52	38	62	48	55	37	41	47
26	---	39	25	42	48	40	63	49	54	38	41	48
27	---	39	26	46	40	41	56	50	54	38	41	48
28	---	46	25	48	38	41	51	49	54	38	41	43
29	---	47	27	48	37	43	49	49	55	38	41	43
30	---	45	30	46	---	44	49	49	53	39	42	37
31	---	---	29	45	---	47	---	50	---	41	42	---
MONTH	---	43	32	37	47	39	58	45	53	34	4[illegible]	[illegible]3

DISSOLVED CHLORIDE (CL), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	78	33	82	46	76	76	79	90	51	57
2	---	---	110	30	66	44	78	77	78	96	55	58
3	---	---	97	31	69	45	81	78	82	92	57	57
4	---	47	65	33	72	46	85	74	81	94	55	58
5	---	46	40	27	69	45	91	47	81	30	50	58
6	---	47	56	34	74	45	67	44	83	63	55	59
7	---	49	67	36	71	32	90	49	85	48	59	59
8	---	50	58	33	72	67	93	46	110	33	56	59
9	---	51	48	32	72	49	92	50	86	30	56	57
10	---	53	38	33	70	50	95	48	86	23	57	61
11	---	56	30	35	68	53	94	47	85	21	57	61
12	---	58	29	42	68	56	94	45	86	20	57	62
13	---	59	35	42	72	49	94	54	86	20	57	59
14	---	62	40	42	71	49	98	58	86	21	57	62
15	---	65	21	45	70	49	99	69	87	20	57	62
16	---	65	11	48	69	47	110	61	85	22	56	60
17	---	67	11	50	71	46	110	62	87	21	56	60
18	---	74	13	49	72	46	120	64	88	21	56	60
19	---	74	24	49	73	47	110	86	87	21	56	60
20	---	71	30	49	70	50	120	67	87	21	56	59
21	---	62	30	51	72	47	120	70	87	20	56	60
22	---	67	32	57	77	49	140	73	87	49	56	59
23	---	65	34	55	75	47	130	72	89	49	57	64
24	---	69	34	56	93	48	130	73	87	65	56	89
25	---	70	28	59	84	48	110	73	92	46	55	72
26	---	49	24	58	74	53	110	76	90	48	57	73
27	---	49	26	69	52	55	96	79	88	47	56	75
28	---	70	23	73	48	56	83	76	90	48	56	60
29	---	72	27	75	46	60	77	76	91	48	56	62
30	---	66	33	68	---	64	77	76	88	50	57	45
31	---	---	31	65	---	71	---	78	---	55	57	---
MONTH	---	60	39	47	70	50	99	65	87	43	56	62

07178620 NEWT GRAHAM LOCK AND DAM NEAR INOLA, OKLA.--Continued

DISSOLVED SOLIDS, IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972 (CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	364	219	375	275	359	359	366	399	289	307
2	---	---	441	207	331	265	366	362	366	415	299	308
3	---	---	419	212	340	271	372	366	375	403	304	306
4	---	276	329	219	347	272	383	354	374	408	300	308
5	---	272	251	197	339	269	401	278	372	210	285	308
6	---	278	301	224	354	269	333	267	377	322	300	311
7	---	283	333	233	346	217	398	283	383	279	310	312
8	---	285	309	222	349	277	407	276	407	223	304	312
9	---	288	279	216	348	283	403	285	387	208	303	307
10	---	295	243	219	341	285	412	280	387	180	305	316
11	---	304	208	228	336	293	408	276	385	171	306	316
12	---	308	285	260	336	301	408	269	387	169	305	316
13	---	312	231	257	340	283	411	296	388	168	305	319
14	---	320	249	257	346	284	410	308	386	171	305	311
15	---	329	172	268	343	283	425	336	391	170	305	318
16	---	329	104	279	339	277	442	316	384	177	302	315
17	---	333	104	285	344	276	463	320	389	174	302	314
18	---	353	126	283	347	274	469	325	392	174	304	315
19	---	353	185	283	351	278	466	386	389	174	303	315
20	---	346	210	284	341	285	475	334	391	173	302	310
21	---	320	211	288	349	277	471	343	389	169	303	313
22	---	332	218	304	360	283	544	352	389	282	303	312
23	---	328	224	300	355	278	517	349	394	283	306	324
24	---	338	226	302	407	281	517	350	390	327	302	395
25	---	341	203	311	381	280	458	350	404	273	300	348
26	---	283	185	307	352	293	463	358	398	280	304	351
27	---	283	193	340	291	299	414	368	343	278	303	355
28	---	341	182	350	279	302	378	358	397	280	302	313
29	---	347	195	355	274	315	361	359	402	279	304	319
30	---	330	221	335	---	325	361	358	393	285	305	269
31	---	---	214	327	---	344	---	364	---	300	307	---
MONTH	---	315	237	270	343	284	423	329	389	252	302	318

07185000 NEOSHO RIVER NEAR COMMERCE, OKLA.

LOCATION.--Lat 36°55'43", long 94°57'26", in SW1/4SE1/4 sec.5, T.28 N., R.22 E., Ottawa County, at gaging station at bridge on county road, 1.3 mi (2.1 km) upstream from Mud Creek, 2.2 mi (3.5 km) downstream from Fourmile Creek, 4.5 mi (7.2 km) west of Commerce, and at mile 153.4 (246.8 km).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	PHOSPHATE (PO4) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)
OCT. 27...	1600	11	198	0	44	11	1.8	.70	.23	194	.26
NOV. 22...	1190	18	212	0	61	20	1.6	.32	.11	304	.41
DEC. 28...	1630	19	202	0	80	18	3.6	.47	.15	331	.45
JAN. 25...	815	23	246	0	100	24	5.1	.23	.07	349	.47
FEB. 16...	1210	29	212	0	160	24	.30	.38	.12	416	.57
MAR. 29...	412	31	226	0	140	30	.30	.20	.06	434	.59
APR. 26...	3600	29	180	0	80	38	2.6	.18	.06	353	.48
MAY 30...	632	13	184	2	46	13	2.4	.42	.14	254	.35
JUNE 28...	322	17	224	0	54	17	.70	.30	.10	299	.41
JULY 27...	2380	12	144	0	34	12	2.8	.67	.22	203	.28
AUG. 30...	592	19	166	0	49	22	.40	.32	.10	255	.35
SEP. 26...	259	16	188	0	97	11	2.7	.47	.15	258	.35

07185000 NEOSHO RIVER NEAR COMMERCE, OKLA.

DRAINAGE AREA.--5,876 sq mi (15,218.8 km^3).

PERIOD OF RECORD.--Chemical analyses: October 1947 to September 1954, December 1959 to current year.
Water temperatures: November 1947 to September 1954.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (MG/L)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)
OCT. 27...	528	55	130	41	.4	301	7.6	3	40	26	1.2
NOV. 22...	977	25	230	56	.5	510	8.1	2	15	13	1.0
DEC. 28...	1200	49	240	74	.5	514	8.0	1	40	14	1.6
JAN. 25...	768	17	290	88	.6	629	8.2	1	15	13	2.0
FEB. 16...	1360	44	310	136	.7	686	8.3	4	15	21	6.6
MAR. 29...	483	2	300	115	.8	686	8.2	2	--	11	2.6
APR. 26...	3430	234	220	72	.9	546	7.5	3	30	30	3.4
MAY 30...	433	75	190	36	.4	406	8.4	2	30	18	2.6
JUNE 28...	260	49	220	36	.5	476	8.3	1	9	17	2.6
JULY 27...	1300	130	150	32	.4	330	8.3	2	35	17	1.8
AUG. 30...	408	44	170	34	.6	411	8.3	15	20	12	1.8
SEP. 26...	180	70	170	81	.5	397	7.8	70	50	13	1.6

FIELD ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION
OCT. 27...	305	8.2	17.0	7.9	86
NOV. 22...	505	7.9	9.0	12.4	114
DEC. 28...	495	7.9	8.0	11.0	97
JAN. 25...	560	7.5	3.0	12.8	96
FEB. 16...	680	8.3	4.0	13.4	111
MAR. 29...	640	8.2	9.0	11.0	101
APR. 26...	495	8.0	15.0	8.8	95
MAY 24...	380	8.0	24.0	6.9	85
30...	395	8.3	24.0	8.3	101
JUNE 28...	475	8.2	27.5	6.6	87
JULY 27...	325	8.1	28.0	6.9	91
AUG. 30...	400	8.3	26.0	7.2	92
SEP. 26...	400	7.8	22.0	7.1	86

07192060 PRYOR CREEK BELOW SULFUR CREEK, NEAR PRYOR, OKLA.

LOCATION.--Lat 36°13'20", long 95°15'20", in NW1/4NE1/4 sec.10, T.20 N., R.19 E., Mayes County, at abandoned bridge, approximately 2.0 mi (3.2 km) downstream from Sulfur Creek, and 5.4 mi (8.7 km) southeast of Pryor.

PERIOD OF RECORD.--Chemical analyses: July 1966 to current year.
Water temperatures: July 1966 to September 1967.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED AMMONIA (NH4) (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)
OCT.				
01...	76	.60	.59	610
08...	10	3.8	.16	290
15...	52	16	2.1	553
22...	6.5	.60	.49	148
31...	25	10	1.5	377
NOV.				
07...	120	6.6	.62	754
13...	35	10	1.8	509
20...	5.0	1.4	.38	251
27...	12	8.0	.38	376
DEC.				
03...	25	7.2	.61	153
10...	5.0	1.7	.08	311
19...	10	3.9	.29	208
24...	25	5.3	.57	330
31...	8.0	1.9	.34	248
JAN.				
09...	24	5.9	.76	353
15...	28	5.3	.52	413
23...	45	5.8	.65	463
28...	40	50	12	555
FEB.				
06...	80	8.0	4.3	689
12...	42	97	21	699
18...	29	5.3	.54	471
26...	49	.30	.76	549
MAR.				
05...	56	5.9	.70	614
12...	56	6.2	.13	617
19...	50	4.4	2.0	620
26...	170	13	1.9	995
APR.				
01...	130	6.7	.70	888
07...	120	7.8	.08	[illegible]
16...	82	2.9	.11	608
23...	42	2.9	.02	452
29...	42	6.2	.04	526
MAY				
05...	8.0	2.8	.25	307
14...	31	4.5	.70	438
20...	60	5.6	.08	562
27...	110	6.2	.66	[illegible]
JUNE				
03...	75	7.7	.37	762
09...	88	4.0	.04	889
18...	95	13	2.0	926
23...	95	31	6.1	878
30...	8.0	8.4	.58	353
JULY				
09...	62	9.6	.62	520
18...	62	11	.52	565
23...	85	17	.02	776
29...	78	23	3.3	788
AUG.				
05...	76	65	3.0	930
11...	94	17	2.4	964
18...	100	26	4.6	932
SEP.				
01...	78	9.3	.40	850
08...	92	11	2.6	913
15...	92	15	1.1	868
23...	100	10	1.1	1010
29...	30	12	2.2	298

07193500 NEOSHO RIVER BELOW FORT GIBSON LAKE, NEAR FORT GIBSON, OKLA.

LOCATION.--Lat 35°51'15", long 95°13'45", in SE1/4NW1/4 sec.19, T.16 N., R.20 E., Cherokee County at Fort Gibson Dam, 1.1 mi (1.8 km) upstream from gaging station, and 4.0 mi (6.4 km) north of Fort Gibson, and at mile 6.6 (10.6 km).

DRAINAGE AREA.--12,492 sq mi (32,354.3 km²).

PERIOD OF RECORD.--Chemical analyses: October 1951 to current year.
Water temperatures: October 1951 to September 1963.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-CHARGE (CFS)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
OCT.								
01...	2770	--	--	--	--	--	--	--
15...	874	11	112	0	39	11	.20	174
NOV.								
01...	3190	--	--	--	--	--	--	--
15...	340	11	118	0	38	16	.30	179
DEC.								
01...	429	11	130	0	38	13	.70	170
15...	16900	11	118	0	36	12	.20	176
FEB.								
02...	2690	10	120	0	39	11	.20	180
15...	843	10	116	0	43	13	.10	168
MAR.								
01...	1560	11	124	0	42	13	.20	172
MAY								
01...	7570	11	116	0	43	13	.30	172
JUNE								
01...	25	--	--	--	--	--	--	--
15...	181	10	116	0	40	11	.90	176
JULY								
01...	23	--	--	--	--	--	--	--
15...	7910	11	106	0	39	13	.80	170
AUG.								
01...	2060	--	--	--	--	--	--	--
15...	5820	11	108	0	41	13	.10	170
SEP.								
01...	970	--	--	--	--	--	--	--
15...	8690	12	112	0	42	14	.20	180

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.							
01...	--	--	--	--	--	303	--
15...	.24	411	120	28	.4	295	7.6
NOV.							
01...	--	--	--	--	--	309	--
15...	.24	164	130	33	.4	308	7.6
DEC.							
01...	.23	1970	130	23	.4	305	8.3
15...	.24	8030	130	33	.4	299	7.5
FEB.							
02...	.24	1310	130	32	.4	307	7.3
15...	.23	382	140	45	.4	303	7.6
MAR.							
01...	.23	724	140	38	.4	311	8.0
MAY							
01...	.23	3520	140	45	.4	308	7.7
JUNE							
01...	--	--	--	--	--	299	--
15...	.24	86.0	130	35	.4	302	7.3
JULY							
01...	--	--	--	--	--	291	--
15...	.23	3630	120	33	.4	292	7.1
AUG.							
01...	--	--	--	--	--	297	--
15...	.23	2670	120	31	.4	294	7.3
SEP.							
01...	--	--	--	--	--	301	--
15...	.24	4220	130	38	.4	310	7.4

07195500 ILLINOIS RIVER NEAR WATTS, OKLA.

LOCATION.--Lat 36°07'48", long 94°34'12", in NE1/4 sec.18, T.19 N., R.26 E., Adair County, at gaging station at bridge on U.S. Highway 59, 1.5 mi (2.4 km) north of Watts, 4.5 mi (7.2 km) downstream from Cincinnati Creek, and at mile 106.2 (170.9 km).

DRAINAGE AREA.--635 sq mi (1,644.6 km²).

PERIOD OF RECORD.--Chemical analyses: October 1955 to August 1956, October 1959 to May 1961, July, 1969 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	PHOSPHATE (PO4) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
OCT.									
27...	130	10	140	0	8.6	11	2.9	.57	.18
NOV.									
23...	187	11	140	0	9.5	12	4.6	.82	.27
DEC.									
20...	907	5.2	88	0	9.0	7.5	10	.36	.12
JAN.									
18...	197	4.9	118	0	9.1	8.2	8.1	.46	.15
FEB.									
24...	196	5.5	108	4	10	9.6	3.9	.56	.18
MAR.									
15...	136	8.4	116	6	11	9.2	2.7	.67	.22
APR.									
18...	365	6.2	132	0	10	8.8	1.8	.80	.26
MAY									
06...	782	5.2	112	0	13	8.4	5.7	.41	.13
JUNE									
21...	92	6.9	130	0	9.0	9.6	1.3	.56	.18
JULY									
25...	81	5.2	124	0	7.4	8.0	5.2	.51	.17
AUG.									
15...	88	6.8	140	0	7.1	10	.38	.51	.17
SEP.									
19...	86	10	150	0	8.2	11	.49	.61	.20

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)
OCT.								
27...	158	.21	55.5	120	5	.4	265	8.3
NOV.								
23...	160	.22	80.8	120	5	.4	279	8.0
DEC.								
20...	118	.16	288	88	16	.2	198	7.9
JAN.								
18...	145	.20	77.1	110	13	.2	247	8.0
FEB.								
24...	137	.19	72.5	110	15	.2	232	8.6
MAR.								
15...	139	.19	51.0	110	5	.3	251	8.7
APR.								
18...	146	.20	136	120	12	.2	252	8.2
MAY								
06...	120	.17	256	110	18	.2	229	8.1
JUNE								
21...	152	.21	37.8	110	3	.3	249	8.2
JULY								
25...	145	.20	16.1	110	8	.2	240	7.9
AUG.								
15...	149	.20	35.4	120	5	.3	253	8.2
SEP.								
19...	153	.21	27.3	120	0	.4	272	7.9

07195500 ILLINOIS RIVER NEAR WATTS, OKLA.--Continued

FIELD ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION
OCT.					
27...	205	8.0	19.5	9.1	100
NOV.					
23...	270	8.4	8.5	11.9	109
DEC.					
20...	195	8.4	9.0	9.8	92
JAN.					
18...	250	8.1	6.0	10.4	89
FEB.					
24...	235	8.9	9.0	12.6	114
MAR.					
15...	250	9.3	14.0	8.7	88
APR.					
18...	255	8.9	19.0	9.0	102
MAY					
06...	240	8.0	19.0	8.3	100
JUNE					
21...	255	8.1	25.5	8.0	102
JULY					
25...	250	7.6	29.0	7.1	95
AUG.					
15...	255	8.4	30.0	7.8	103
SEP.					
19...	240	8.2	28.0	7.6	100

07198000 ILLINOIS RIVER NEAR GORE, OKLA.

LOCATION.--Lat 35°34'23", long 95°04'07", in NE1/4SW1/4 sec.27, T.13 N., R.21 E., Sequoyah County, at Tenkiller Ferry Dam, 4.3 mi (6.9 km) upstream from gaging station, 6.0 mi (9.6 km) northeast of Gore, and at mile 12.8 (20.6 km).

DRAINAGE AREA.--1,610 sq mi (4,169.9 km²).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	PHOSPHATE (PO4) (MG/L)
OCT.									
01...	265	--	--	--	--	--	--	--	--
15...	505	3.0	104	0	9.0	4.5	.07	.30	--
NOV.									
01...	12	--	--	--	--	--	--	--	--
15...	13	7.4	108	0	6.0	14	.75	3.3	--
DEC.									
01...	90	4.2	96	0	10	6.0	.00	.00	--
JAN.									
10...	2890	3.3	94	0	9.0	5.1	.02	.10	--
FEB.									
01...	2000	--	--	--	--	--	--	--	--
15...	1390	3.9	96	0	6.5	5.0	.20	.95	.20
MAR.									
03...	48	--	--	--	--	--	--	--	--
15...	390	3.7	94	0	7.5	5.5	.20	.90	.04
APR.									
17...	40	3.9	94	0	8.0	5.5	.45	2.0	.35
MAY									
15...	3250	3.1	92	0	8.0	5.5	.14	.60	--
JUNE									
01...	12	--	--	--	--	--	--	--	--
15...	17	5.9	92	0	10	11	.29	1.3	--
30...	28	--	--	--	--	--	--	--	--
JULY									
14...	32	6.3	98	0	9.0	11	.27	1.2	--
31...	28	--	--	--	--	--	--	--	--
AUG.									
15...	37	5.1	96	0	8.5	9.0	.63	2.8	--
SEP.									
01...	40	--	--	--	--	--	--	--	--
15...	27	7.0	102	0	7.5	12	.00	.00	--

07198000 ILLINOIS RIVER NEAR GORE, OKLA.

PERIOD OF RECORD.--Chemical analyses: October 1953 to current year.
Water temperatures: October 1953 to September 1963.

REMARKS.--No appreciable inflow between sampling point and gaging station except during periods of heavy local runoff.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
OCT.								
01...	--	--	--	--	--	--	196	--
15...	114	.16	155	92	7	.1	197	7.6
NOV.								
01...	--	--	--	--	--	--	241	--
15...	134	.18	4.70	100	11	.3	230	7.7
DEC.								
01...	112	.15	27.2	90	11	.2	192	7.8
JAN.								
14...	105	.14	819	84	7	.2	183	7.8
FEB.								
01...	--	--	--	--	--	--	181	--
15...	101	.14	379	82	3	.2	185	8.1
MAR.								
03...	--	--	--	--	--	--	180	--
15...	103	.14	108	82	5	.2	180	8.2
APR.								
17...	101	.14	10.9	84	7	.2	182	7.9
MAY								
15...	100	.14	877	84	5	.1	183	7.8
JUNE								
01...	--	--	--	--	--	--	202	--
15...	117	.16	5.37	88	13	.3	206	7.6
30...	--	--	--	--	--	--	215	--
JULY								
18...	118	.16	10.2	92	12	.3	210	7.4
31...	--	--	--	--	--	--	203	--
AUG.								
15...	114	.16	11.4	88	9	.2	202	7.2
SEP.								
01...	--	--	--	--	--	--	206	--
15...	123	.16	8.75	90	6	.3	214	6.6

07228500 CANADIAN RIVER NEAR BRIDGEPORT, OKLA.

LOCATION.--Lat 35°43'00", long 98°22'45", in SE 1/4 SW 1/4 sec. 28, T.13 N., R.11 W., Blaine County, at gaging station at Chicago, Rock Island and Pacific Railroad Co. bridge, 1.0 mi (1.6 km) north of Bridgeport, 2.8 mi (4.5 km) upstream from Lumpmouth Creek, and at mile 267.1 (429.8 km).

DRAINAGE AREA.--25,229 sq mi (65,343.1 km²), of which 4,801 sq mi (12,434.6 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: Water years 1961 and 1964 (partial-record station), October 1969 to current year. Water temperatures: October 1969 to current year.

EXTREMES, Current year.--Dissolved solids: Maximum, 1,410 mg/l May 18-24; minimum, 212 mg/l Oct. 2-3.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-CHARGE (CFS)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
OCT.								
01...	65	190	168	16	210	270	1.5	976
02-03	110	28	118	4	36	30	4.0	212
04-07	23	69	180	6	180	120	3.9	662
08-21	20	34	236	8	200	19	5.2	572
22-28	637	130	166	4	140	180	2.2	678
29-31	2690	38	66	8	120	51	.00	330
NOV.								
01-04	252	120	84	10	200	288	.00	708
05-19	119	190	232	10	260	270	2.4	1060
20-21	8020	160	198	0	170	210	3.0	744
22-24	969	180	208	0	230	260	1.9	968
25-30	310	230	252	0	260	340	1.3	1180
DEC.								
01-11	461	250	188	4	280	370	.20	1260
12-16	746	69	142	2	120	100	3.0	483
17-31	191	240	262	0	290	360	2.4	1370
JAN.								
01-12	186	210	224	0	320	320	.90	1210
13-25	234	230	276	0	320	330	.20	1350
26-29	160	170	208	0	240	240	2.2	1030
30-31	146	210	264	0	340	300	3.8	1200
FEB.								
01-10	190	210	260	0	360	310	2.1	1290
11-20	152	210	252	0	330	310	3.0	1260
21-29	115	210	234	0	360	300	2.3	1270
MAR.								
01-09	90	200	238	0	360	270	1.9	1230
10-20	62	140	230	0	380	170	1.3	1080
21-31	64	67	256	0	340	63	3.1	841
APR.								
01-10	36	43	254	2	330	28	1.7	780
11-20	37	48	256	0	340	24	3.5	820
21-22	66	40	282	0	310	23	4.6	760
23-30	19	41	268	2	320	34	3.5	770
MAY								
01...	20	39	272	0	270	21	2.5	756
02-11	23	110	204	0	440	130	3.8	991
12...	2060	93	210	0	300	120	6.9	823
13-17	534	120	152	0	450	170	2.6	1050
18-24	116	250	148	0	460	360	1.6	1410
25-31	64	120	196	0	390	170	1.8	1020
JUNE								
01-09	56	170	176	0	320	220	2.5	960
10-12	23	46	220	0	280	28	1.7	648
13...	20	130	234	0	270	160	1.5	878
14-17	278	53	182	0	180	51	2.1	503
18...	40	97	134	0	430	140	1.7	976
19...	66	66	216	0	280	28	2.3	650
20-23	58	82	174	0	370	110	1.7	856
24-30	32	54	186	0	300	55	3.2	690
JULY								
01-12	46	52	182	0	270	52	1.9	662
13-17	9.1	120	138	0	360	160	1.7	928
18-20	3.6	58	226	0	280	48	2.8	686
21-24	.62	47	148	0	230	25	3.4	526
AUG.								
22-31	11	33	206	0	160	17	2.3	434
SEP.								
01-09	51	29	180	0	170	14	3.7	471
10-19	116	90	156	0	190	110	4.3	596
20-30	2.2	39	240	0	170	23	2.8	540
WTD. AVG.	--	149	189	2	235	209	2.1	872
TIME WTD. AVG.	211	128	215	2	207	171	2.4	919
TOT. LOAD (TONS)	--	28800	36400	394	45300	40300	403	168000

07228500 CANADIAN RIVER NEAR BRIDGEPORT, OKLA.

EXTREMES, Current year.--Continued.
Hardness: Maximum, 580 mg/l May 13-17; minimum, 130 mg/l Oct. 2-3.
Specific conductance: Maximum daily, 2,230 micromhos May 21; minimum daily, 374 micromhos Oct. 3.
Water temperatures: Maximum, 34.0°C Sept. 17,19; minimum, freezing point on Jan. 5, Feb. 2-4.

Period of record.--Dissolved solids: Maximum, 1,540 mg/l Apr. 3-16, 1970; minimum, 192 mg/l Sept. 24-25, 1971.
Hardness: Maximum, 710 mg/l May 1-10, 1970; minimum, 120 mg/l Sept. 24-25, 1971.
Specific conductance: Maximum daily, 2,340 micromhos Apr. 8, 1970; minimum daily, 301 micromhos Sept. 24, 1971.
Water temperatures: Maximum, 36°C Sept. 12, 14, 1971, minimum, freezing point on several days during November-January.

REMARKS.--No flow July 25-Aug. 21.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.							
01...	1.33	171	330	170	4.6	1520	8.8
02-03	.29	63.0	130	27	.9	374	8.5
04-07	.90	41.1	320	160	2.2	995	8.5
08-21	.78	38.9	370	160	.8	789	8.5
22-28	.92	800	250	110	3.6	1120	8.4
29-31	.45	2400	180	110	1.2	532	8.9
NOV.							
01-04	.96	482	300	210	3.0	1210	8.8
05-19	1.48	341	480	230	3.9	1670	8.5
20-21	1.01	16100	300	180	4.0	1260	8.0
22-24	1.32	2480	370	200	4.1	1540	8.1
25-30	1.60	988	450	240	4.7	1880	8.2
DEC.							
01-11	1.71	1570	430	270	5.2	1940	8.4
12-16	.66	973	230	110	2.0	769	8.1
17-31	1.86	706	530	320	4.5	1990	8.2
JAN.							
01-12	1.65	608	530	350	4.0	1900	8.3
13-25	1.84	853	550	320	4.3	1970	8.2
26-29	1.60	445	480	240	3.6	1560	8.1
30-31	1.63	473	550	330	3.9	1860	8.2
FEB.							
01-10	1.75	662	560	330	3.9	1920	8.5
11-20	1.71	517	520	310	4.0	1880	8.3
21-29	1.73	394	530	340	4.0	1870	8.3
MAR.							
01-09	1.67	299	550	360	3.7	1840	8.3
10-20	1.47	181	540	350	2.6	1530	8.3
21-31	1.14	99.9	520	310	1.3	1160	8.3
APR.							
01-10	1.06	75.8	500	290	.8	1010	8.4
11-20	1.12	82.3	510	300	.9	1060	8.2
21-22	1.03	90.3	500	270	.8	994	8.2
23-30	1.05	39.5	510	290	.8	1010	8.4
MAY							
01...	1.03	40.8	450	230	.8	992	8.3
02-11	1.35	61.5	560	390	2.0	1380	7.7
12...	1.12	4580	450	280	1.9	1160	7.0
13-17	1.43	1510	580	460	2.2	1460	7.7
18-24	1.92	442	560	440	4.6	2090	8.0
25-31	1.39	176	540	380	2.2	1420	7.8
JUNE							
01-09	1.32	146	390	250	3.7	1500	8.0
10-12	.88	40.2	410	230	.9	904	8.0
13...	1.19	47.4	410	220	2.8	1320	8.2
14-17	.68	378	280	130	1.4	770	7.9
18...	1.33	105	530	420	1.8	1360	7.8
19...	.88	116	400	220	1.0	895	7.8
20-23	1.16	134	490	350	1.6	1220	8.1
24-30	.98	59.6	420	270	1.1	966	8.0
JULY							
01-12	.90	82.2	390	240	1.1	927	8.0
13-17	1.26	22.8	450	340	2.5	1340	7.7
18-20	.93	6.65	410	230	1.2	971	7.9
21-24	.72	.88	290	170	1.2	749	7.8
AUG.							
22-31	.59	12.9	280	110	.9	659	8.0
SEP.							
01-09	.64	64.8	280	130	.8	649	7.8
10-19	.81	187	280	150	2.6	945	7.9
20-30	.73	3.21	320	120	.9	739	8.3
WTD. AVG.	1.19	--	376	218	3.3	1350	8.2
TIME WTD. AVG.	1.25	--	442	263	2.6	1350	8.2
TOT. LOAD (TONS)	--	--	--	--	--	--	--

07228500 CANADIAN RIVER NEAR BRIDGEPORT, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972 (ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1540	1200	2070	2010	1910	1890	1060	992	1420	896	---	667
2	378	1200	2080	1960	1910	1900	1030	1410	1530	892	---	637
3	374	1390	---	2020	1940	1910	1040	1410	1530	912	---	659
4	1060	1390	---	2010	1950	1860	1030	1410	1530	873	---	654
5	1060	1600	---	2010	1940	1840	1020	1420	1530	873	---	571
6	956	1600	2080	2090	1970	1860	1020	1420	1530	897	---	577
7	956	1790	1980	2100	1980	1770	1010	1420	1530	809	---	678
8	809	1790	1980	2090	1970	1780	1020	1220	1530	809	---	676
9	811	1770	1980	1860	1960	1790	1020	1220	1320	807	---	675
10	811	1760	2140	1900	2000	1650	1020	1220	900	807	---	1000
11	804	1790	2140	1920	2000	1650	1020	1100	896	809	---	997
12	806	1780	768	1930	1990	1640	1020	1150	895	816	---	974
13	814	1780	768	2090	1820	1640	1040	1540	1320	1420	---	983
14	796	1720	768	2090	1810	1520	1040	1550	893	1420	---	930
15	800	1720	764	2090	---	1520	1030	1540	725	1410	---	927
16	781	1720	766	2200	1900	1510	1040	1550	727	1420	---	927
17	781	1620	2140	2200	1900	1520	1120	1160	731	1420	---	853
18	750	1620	2020	2210	1900	1520	1040	2220	1350	970	---	839
19	753	1620	2020	1910	1940	1370	1120	2220	890	967	---	858
20	827	1260	2030	1910	1930	1380	1120	2220	1360	967	---	764
21	806	1260	2020	1900	1940	1190	997	2230	1360	745	---	766
22	1160	1540	2040	1950	1930	1200	---	1940	1130	742	---	764
23	1160	1550	2030	1950	1880	1190	1040	1950	1130	747	---	739
24	1220	1540	2030	1950	1880	1370	1040	1940	923	748	664	735
25	1190	1890	2030	1960	1880	1200	1040	1430	926	736	619	746
26	1040	1890	2030	1580	1940	1190	994	1430	---	736	622	742
27	1030	1550	2030	1670	1870	1190	1040	1420	923	---	664	747
28	1040	2000	2050	1560	1870	1190	997	1420	892	---	661	749
29	560	2010	2050	1600	1880	1070	991	1420	890	---	620	640
30	552	2000	2030	1910	---	1070	994	1430	892	---	653	642
31	540	---	1950	1910	---	1030	---	1420	---	---	650	---
MONTH	870	1650	1810	1950	1920	1500	1030	1530	1140	948	---	771

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972 (ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.0	15.0	8.0	9.0	3.0	5.0	---	18.0	22.0	29.0	---	26.0
2	20.0	16.0	7.0	5.0	0.0	4.0	12.5	16.0	25.0	26.0	---	25.0
3	23.0	10.0	---	4.0	0.0	6.0	10.0	18.5	24.0	25.0	---	24.0
4	19.0	11.0	---	3.0	0.0	8.0	14.0	18.0	25.0	28.0	---	26.0
5	20.0	11.0	---	0.0	3.0	10.0	18.0	19.0	26.0	30.0	---	29.0
6	18.0	9.0	8.0	2.0	2.0	6.0	19.0	19.0	26.5	29.0	---	29.5
7	19.0	11.0	9.0	3.0	3.0	9.0	17.0	18.0	27.0	30.0	---	31.0
8	20.0	9.0	7.0	5.0	5.0	10.0	20.0	17.0	23.0	29.0	---	30.0
9	18.0	10.0	6.0	8.0	4.0	11.0	21.0	19.0	22.0	31.0	---	32.0
10	15.0	11.0	7.0	7.0	3.0	10.0	23.0	20.0	27.5	30.0	---	31.0
11	20.0	12.0	9.0	9.0	2.0	15.0	23.0	19.0	28.0	31.0	---	32.0
12	19.0	13.0	8.0	8.0	5.0	15.0	22.0	18.0	27.0	29.0	---	31.0
13	20.0	12.5	10.0	8.0	4.0	10.0	25.0	19.0	27.5	30.0	---	33.0
14	22.0	11.0	9.0	6.0	5.0	10.0	24.0	21.0	28.0	30.0	---	30.0
15	20.0	11.5	7.5	---	---	12.0	22.0	22.0	29.0	31.0	---	28.0
16	22.0	11.0	10.0	2.0	8.0	11.0	20.0	23.0	27.0	31.5	---	29.5
17	18.0	11.0	8.0	3.0	9.0	10.0	18.0	22.0	28.0	29.0	---	34.0
18	19.5	10.0	11.0	5.0	10.0	9.0	20.0	24.0	29.0	25.0	---	33.5
19	20.0	9.0	10.0	5.0	8.0	17.0	18.0	22.0	27.0	29.0	---	34.0
20	18.0	10.0	8.0	6.0	9.0	19.0	20.5	22.5	25.0	30.0	---	23.0
21	21.0	9.0	10.0	6.0	10.0	18.0	18.0	23.5	26.0	31.0	---	20.0
22	15.0	7.0	9.0	7.0	9.0	19.0	---	22.0	24.0	30.0	---	24.0
23	14.0	8.0	9.0	8.0	10.0	15.0	19.0	24.0	22.0	32.0	---	30.0
24	16.0	10.0	11.0	7.0	9.0	12.0	21.0	23.0	27.0	31.0	30.0	31.0
25	15.0	8.0	13.0	---	8.0	9.0	20.0	24.0	29.0	32.0	31.0	29.0
26	14.5	9.0	12.0	7.0	10.0	10.0	20.0	23.5	---	33.0	30.0	27.0
27	14.0	8.0	13.0	6.0	11.0	7.0	16.0	23.0	31.0	---	29.0	30.0
28	16.0	7.0	9.0	4.0	14.0	5.0	18.0	22.5	32.0	---	29.0	31.0
29	15.0	6.0	8.0	2.0	17.0	10.0	16.0	21.0	32.0	---	28.0	29.0
30	14.0	7.0	7.5	4.0	---	12.0	16.0	22.0	31.0	---	25.0	28.0
31	12.0	---	8.0	5.0	---	14.0	---	23.0	---	---	26.0	---
MONTH	18.0	10.0	9.0	5.5	6.5	11.0	19.0	21.0	27.0	29.5	---	29.0

ARKANSAS RIVER BASIN

07229900 LAKE THUNDERBIRD NEAR NORMAN, OKLA.

LOCATION.--Lat 35°13'15", long 97°13'05", in NW1/4SE1/4 sec.29, T.9 N., R.1 E., Cleveland County, upstream face of dam at outlet gate, 0.2 mi (0.3 km) upstream from gaging station, 13.0 mi (20.9 km) east of Norman, and at mile 96.4 (155.1 km).

DRAINAGE AREA.--256 sq mi (633.0 km²).

PERIOD OF RECORD.--Chemical analyses: October 1966 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	RESER-VOIR STORAGE (AC-FT)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
OCT. 05...	101400	17	216	0	14	27	.20	233
NOV. 22...	101900	17	220	0	15	27	.30	231
DEC. 21...	103400	16	218	0	14	26	.20	234
JAN. 25...	104200	20	218	0	9.0	31	.40	238
FEB. 23...	103700	19	218	0	7.9	30	.50	232
MAR. 28...	102200	19	224	0	9.0	29	.50	237
APR. 28...	106400	17	224	0	8.3	26	.20	235
MAY 23...	107200	17	208	0	9.1	26	.10	226
JUNE 29...	104500	19	210	2	9.2	26	.10	229
JULY 25...	102600	18	212	0	10	28	.20	229
AUG. 30...	98900	18	212	0	9.6	29	.40	233
SEP. 28...	95600	18	216	0	9.6	28	.20	232

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TUR-BID-ITY (MG/L)
OCT. 05...	.32	190	13	.5	416	8.3	4
NOV. 22...	.31	190	10	.5	410	8.2	4
DEC. 21...	.32	190	11	.5	407	8.1	4
JAN. 25...	.32	180	1	.6	433	8.2	2
FEB. 23...	.32	180	1	.6	416	8.0	2
MAR. 28...	.32	190	6	.6	432	7.9	4
APR. 28...	.32	190	6	.5	429	7.9	3
MAY 23...	.31	180	9	.6	407	8.0	1
JUNE 29...	.31	180	4	.6	412	8.4	1
JULY 25...	.31	180	6	.6	420	7.8	3
AUG. 30...	.32	180	6	.6	425	7.4	3
SEP. 28...	.32	180	3	.6	426	7.8	2

07231000 LITTLE RIVER NEAR SASAKWA, OKLA.

LOCATION.--Lat 34°59'02", long 96°33'01", in NE1/4 sec.22, T.6 N., R.7 E., Seminole County, at gaging station at bridge on county road, 2.8 mi (4.5 km) northwest of Sasakwa, 8.7 mi (14.0 km) downstream from Salt Creek, and at mile 24.1 (38.8 km).

DRAINAGE AREA.--865 sq mi (2,240.4 km²).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
OCT.								
05...	126	92	0	0	7.0	180	2.4	575
15...	4.0	220	236	0	24	420	.20	920
25...	135	110	136	2	14	210	1.2	504
NOV.								
05...	18	330	230	0	32	680	.70	1520
15...	8.0	440	320	0	25	910	.60	1920
25...	20	360	232	0	32	740	.90	1560
DEC.								
04...	50	580	262	0	35	1200	.40	2360
14...	480	86	154	0	20	170	1.6	432
25...	124	240	236	0	21	540	.90	1160
JAN.								
05...	58	320	210	0	27	670	1.1	1360
15...	34	430	326	0	33	890	.70	1860
24...	39	510	330	0	36	1100	.90	2160
FEB.								
05...	46	520	338	0	40	1100	.10	2200
15...	99	520	322	0	40	1100	.10	2240
25...	45	530	324	0	42	1100	.10	2160
MAR.								
04...	38	460	292	0	39	920	.20	1910
14...	19	580	312	0	41	1200	.60	2570
24...	32	620	274	0	49	1300	1.7	2600
APR.								
05...	9.7	580	176	0	54	1200	1.4	2400
15...	3.1	630	296	0	56	1300	1.5	2640
25...	122	150	188	0	28	310	1.3	727
MAY								
04...	126	110	172	4	19	230	1.7	584
15...	975	52	136	0	16	100	1.9	312
25...	51	280	280	0	28	580	1.4	1310
JUNE								
05...	26	370	292	0	34	740	1.5	1670
15...	12	590	240	0	40	1200	2.0	2570
25...	46	450	296	0	33	880	1.6	1910
JULY								
05...	92	300	180	0	46	560	1.1	1160
15...	2.0	210	216	0	28	410	.80	928
AUG.								
25...	.62	130	104	0	19	250	2.0	546
SEP.								
05...	2.2	320	206	0	12	580	2.9	1190
25...	1.0	400	124	0	16	790	1.4	1520

07231000 LITTLE RIVER NEAR SASAKWA, OKLA.

PERIOD OF RECORD.--Chemical analyses: September 1951 to current year.
Water temperatures: October 1955 to current year.

REMARKS.--No flow July 17-Aug. 8, Aug. 11-21, 23-24, 26-31, Sept. 15-21.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.							
05...	.78	196	170	170	3.1	898	8.0
15...	1.25	9.90	330	140	5.3	1680	8.0
25...	.69	184	190	75	3.5	921	8.4
NOV.							
05...	2.07	74.0	500	310	6.4	2560	6.1
15...	2.61	41.5	640	380	7.6	3300	8.1
25...	2.12	84.0	500	310	7.0	2690	7.9
DEC.							
04...	3.21	319	720	510	9.4	4100	8.0
14...	.59	560	200	74	2.6	774	7.8
25...	1.58	358	460	270	4.9	2070	8.0
JAN.							
05...	1.85	213	480	310	6.4	2460	8.2
15...	2.53	171	660	390	7.3	3270	8.0
24...	2.94	227	740	470	8.2	3760	7.9
FEB.							
05...	2.99	27.3	730	450	8.4	3820	8.0
15...	3.05	599	730	470	8.4	3850	7.9
25...	2.94	262	720	450	8.6	3810	8.0
MAR.							
04...	2.60	196	620	380	8.0	3270	8.0
14...	3.50	132	770	510	9.1	4190	8.0
24...	3.54	225	750	530	9.9	4250	8.1
APR.							
05...	3.26	63.0	630	490	10	3940	8.0
15...	3.59	22.1	770	530	9.9	4340	7.7
25...	.99	239	320	170	3.6	1290	6.9
MAY							
04...	.79	199	250	100	3.0	1020	8.4
15...	.42	821	150	38	1.8	558	7.6
25...	1.78	180	460	230	5.7	2210	8.0
JUNE							
05...	2.27	117	540	300	6.9	2750	8.1
15...	3.50	83.3	720	520	9.6	4050	8.0
25...	2.60	237	560	320	8.3	3150	8.0
JULY							
05...	1.58	288	350	200	7.0	2080	8.0
15...	1.26	5.00	320	140	5.1	1660	7.9
AUG.							
25...	.74	.91	170	85	4.3	977	6.8
SEP.							
05...	1.62	7.10	330	160	7.9	2140	7.6
25...	2.07	4.10	400	300	8.7	2670	7.3

07231000 LITTLE RIVER NEAR SASAKWA, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	986	1760	---	2010	3720	3820	3910	824	2390	3310	2520	2050
2	1200	1920	---	2290	3790	4060	4090	571	2310	---	2570	2060
3	597	---	2870	2240	3740	4780	4050	693	2560	---	2590	2080
4	671	2620	4070	---	3260	3380	4230	1020	2890	---	2610	2070
5	849	2590	---	2540	3850	---	3940	---	2780	2100	2610	2140
6	1440	2730	3580	2200	3690	3230	4150	1430	2910	855	2620	2230
7	1440	2720	---	2970	3670	3140	4060	3000	2980	823	2650	2260
8	898	---	3930	3080	4640	3290	4460	---	3010	973	2650	2280
9	981	2860	2140	3130	3690	3420	4680	693	3080	1180	2280	2270
10	1100	2880	472	3150	3060	3410	4380	790	3170	1440	1870	2320
11	1290	2890	504	3160	4620	3480	4210	1010	3190	1570	2230	2340
12	1440	2980	529	3120	---	3510	4590	527	3150	1590	---	2340
13	1540	3230	600	3330	---	3660	4960	696	3020	1370	2380	2350
14	1610	3010	770	3310	4620	4220	4680	511	2640	1640	2460	2350
15	1680	3310	---	3260	3880	---	4340	555	4040	1660	2490	---
16	1770	3360	528	2990	3060	4370	4680	679	4360	1800	2530	2380
17	1780	3400	484	3660	3200	4520	6920	876	4490	1970	---	2390
18	1740	3500	633	3400	3170	4700	---	1120	4080	2030	2550	2410
19	1760	3180	877	3910	2920	5150	---	1340	4010	2090	3810	2410
20	799	2380	1170	3540	2880	4430	---	1570	3850	2170	2580	2440
21	483	2230	1400	3580	3010	3280	708	---	3570	2220	2660	2340
22	488	2010	1510	3540	3350	6700	1060	2070	3440	2260	2570	134
23	703	2050	1660	3610	3570	4420	1370	1920	3410	---	2570	543
24	845	2170	1860	3790	3630	4300	884	2200	3240	2360	2590	1730
25	918	2660	2060	---	3850	---	1290	2210	3150	---	977	2670
26	1010	2700	2180	3560	3960	4620	1430	2270	3070	2420	2200	2750
27	1060	3070	2340	---	4040	4210	1540	2510	3040	2470	2140	2630
28	1370	3130	2440	---	4020	4300	2390	2360	726	2500	2140	2550
29	---	3340	2430	3410	4020	4030	1910	1190	2070	2500	2150	2480
30	1600	3160	2430	4340	---	3780	730	1660	2420	2510	2140	2440
31	1550	---	2540	4120	---	4020	---	2520	---	2520	2130	---
MONTH	1190	2780	1770	3230	3660	4080	3320	1390	3100	1940	2420	2190

07231000 LITTLE RIVER NEAR SASAKWA, OKLA.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.5	16.0	6.0	8.0	3.0	16.0	10.5	20.0	20.0	20.0	26.0	24.0
2	23.0	13.0	6.0	6.5	4.0	6.0	12.0	---	21.0	---	26.0	25.0
3	20.5	---	3.0	7.0	1.0	6.5	15.5	---	23.5	---	27.0	22.0
4	21.0	9.5	10.0	---	0.0	9.0	12.0	---	28.0	---	26.5	23.0
5	18.0	7.0	8.0	1.0	1.5	---	13.0	---	24.0	23.0	27.0	23.0
6	20.0	13.0	6.0	0.0	4.5	9.5	17.5	---	23.5	21.5	27.0	23.0
7	18.0	9.0	6.0	0.5	0.0	13.0	20.0	---	24.0	23.0	26.0	25.0
8	19.0	---	6.5	2.0	4.0	12.0	15.0	---	25.0	22.5	24.0	26.0
9	19.5	9.0	8.0	6.0	8.0	---	14.0	---	25.5	25.0	24.0	25.0
10	15.0	11.0	7.5	6.0	5.0	11.0	17.5	---	26.0	26.0	25.0	26.0
11	14.0	---	8.0	5.0	5.0	17.5	19.0	---	25.0	26.5	25.5	26.0
12	15.0	10.0	8.5	5.0	---	15.0	22.0	---	25.5	25.5	---	25.5
13	18.0	17.0	5.0	5.0	---	16.5	23.0	20.0	25.0	24.5	25.0	26.0
14	15.0	17.0	6.0	3.0	5.0	14.0	22.0	20.0	25.0	27.0	28.0	26.5
15	18.0	17.0	---	0.0	8.0	---	21.5	18.0	26.0	27.0	28.0	---
16	20.5	15.5	9.5	0.0	6.0	13.0	19.0	20.5	31.5	27.0	29.0	25.5
17	20.0	15.0	8.0	0.5	7.0	12.5	18.0	23.0	31.5	27.0	---	25.5
18	21.0	14.5	9.0	5.0	7.0	14.0	---	24.0	25.0	26.0	31.0	26.0
19	19.0	10.0	8.0	8.5	5.5	14.0	---	24.0	25.5	27.0	31.0	26.5
20	21.0	11.0	7.0	10.0	7.5	15.0	---	22.0	26.5	27.0	27.0	26.0
21	20.0	10.0	6.5	9.0	12.0	14.5	18.0	---	25.5	27.5	27.0	25.0
22	12.0	8.0	6.0	7.0	10.5	14.5	17.0	23.0	25.0	26.0	27.0	15.5
23	17.5	16.5	7.0	6.0	9.5	16.5	17.0	24.0	26.0	---	25.0	17.0
24	15.5	16.5	9.0	7.5	11.5	18.0	18.0	23.5	25.0	26.5	25.0	20.0
25	18.0	16.5	10.5	---	10.0	---	21.0	23.5	27.0	---	22.5	22.0
26	17.0	8.0	12.0	5.0	9.0	18.0	16.0	24.5	27.5	27.5	24.0	24.0
27	16.0	15.0	14.5	---	9.0	16.5	16.0	24.0	28.0	28.5	24.0	21.5
28	17.0	10.0	9.0	---	10.5	15.5	16.0	24.0	24.5	27.5	20.0	22.5
29	---	6.5	10.0	2.0	14.0	10.0	18.0	20.5	27.0	26.5	24.5	23.5
30	19.5	5.5	9.5	5.0	---	10.0	18.5	20.0	26.0	25.0	23.0	14.5
31	14.5	---	8.0	0.5	---	9.0	---	25.5	---	25.5	24.0	---
MONTH	18.0	12.0	8.0	4.5	6.5	13.0	17.5	---	25.5	25.5	26.0	23.5

07231500 CANADIAN RIVER AT CALVIN, OKLA.

LOCATION.--Lat 34°58'32", long 96°14'24", in NE1/4SW1/4 sec.22, T.6 N., R.10 E., Hughes County, at gaging station at bridge on U.S. Highway 75, 0.5 mi (0.8 km) northeast of Calvin, 2.5 mi (4.0 km) upstream from Shawnee Creek, 8.5 mi (13.7 km) downstream from Little River, and at mile 93.9 (151.1 km).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTAN-TANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED BORON (B) (UG/L)
OCT.									
05...	1270	52	32	16	25	88	.40	.08	--
15...	96	120	220	0	52	200	1.3	.38	--
25...	520	64	100	12	28	100	.70	.03	--
NOV.									
05...	550	99	172	0	120	150	3.1	.27	--
15...	192	160	276	0	110	250	3.9	.91	--
25...	1410	160	200	0	140	230	.60	.00	--
DEC.									
05...	690	160	164	8	100	260	.40	.04	--
15...	12300	37	128	0	25	60	1.8	.03	--
25...	710	150	272	0	94	250	2.3	.22	--
JAN.									
05...	430	180	300	0	110	300	1.8	.36	--
15...	131	200	358	0	150	340	3.4	.52	--
25...	432	200	308	0	160	330	3.3	.56	--
FEB.									
05...	330	200	292	0	120	360	3.9	.64	--
15...	452	190	298	0	110	330	2.2	.49	--
25...	276	200	286	0	140	340	1.3	.42	--
MAR.									
05...	216	210	312	0	130	390	1.0	.55	220
15...	190	130	226	0	92	220	2.4	.47	160
25...	183	220	284	0	86	390	2.0	.50	230
APR.									
05...	122	220	312	0	84	400	2.1	.63	210
15...	169	140	168	0	42	250	3.0	.20	150
25...	480	97	194	0	45	160	2.3	.33	150
MAY									
05...	396	87	194	0	46	150	2.4	.32	140
15...	4270	48	160	0	40	72	3.7	.26	150
25...	240	130	242	0	180	220	1.3	.36	200
JUNE									
05...	107	160	186	0	94	260	4.2	.38	220
15...	107	170	186	0	95	280	2.4	.34	240
25...	76	210	134	0	140	340	4.4	.39	310
JULY									
05...	340	230	140	8	36	460	.20	.03	190
15...	68	160	192	0	57	280	2.1	.25	250
25...	6.8	260	238	0	34	520	1.6	.18	240
AUG.									
05...	3.6	320	220	0	37	640	.80	.02	140
15...	22	180	166	0	35	320	2.0	.16	180
24...	23	310	210	0	24	620	1.9	.13	140
SEP.									
05...	29	200	194	0	9.0	400	.40	.02	180
15...	5.8	230	204	0	11	450	2.8	.10	210
25...	76	120	150	0	24	220	3.2	.32	180

07231500 CANADIAN RIVER AT CALVIN, OKLA.

DRAINAGE AREA.--27,952 sq mi (72,395.7 km²), of which 4,801 sq mi (12,434.6 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: July 1965 to current year.
Water temperatures: July 1965 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.								
05...	243	.33	833	84	31	2.5	437	9.4
15...	613	.83	159	260	80	3.2	1070	8.0
25...	329	.45	442	132	30	2.4	592	8.7
NOV.								
05...	595	.81	884	270	130	2.6	1010	8.0
15...	838	1.14	434	360	130	3.7	1430	8.0
25...	772	1.05	2940	300	140	4.0	1320	8.3
DEC.								
05...	770	1.05	1430	280	130	4.2	1350	8.6
15...	256	.35	8500	130	25	1.4	457	7.7
25...	823	1.12	1580	360	140	3.4	1390	8.3
JAN.								
05...	950	1.29	1100	420	170	3.8	1630	8.1
15...	1100	1.50	389	500	210	3.9	1640	8.2
25...	1050	1.43	1220	480	230	4.0	1780	8.2
FEB.								
05...	1050	1.43	936	470	230	4.0	1820	8.1
15...	966	1.31	1180	430	190	4.0	1680	8.1
25...	990	1.35	738	430	200	4.2	1720	8.1
MAR.								
05...	1170	1.59	682	460	200	4.3	1890	7.7
15...	720	.98	369	300	120	3.3	1220	7.4
25...	1100	1.50	544	400	170	4.8	1810	7.3
APR.								
05...	1120	1.52	369	440	180	4.6	1860	7.7
15...	655	.89	299	250	110	3.9	1150	7.0
25...	520	.71	674	230	71	2.8	897	7.6
MAY								
05...	508	.69	543	220	61	2.6	842	7.8
15...	330	.45	3800	170	39	1.6	557	8.1
25...	872	1.19	565	400	200	2.8	1360	8.1
JUNE								
05...	816	1.11	236	280	130	4.2	1300	8.3
15...	858	1.17	248	290	140	4.3	1370	7.7
25...	1000	1.36	205	310	200	5.2	1600	7.4
JULY								
05...	1050	1.43	964	310	190	5.7	1730	8.4
15...	700	.95	128	270	110	4.2	1270	7.9
25...	1880	2.56	34.5	400	210	5.7	1980	8.0
AUG.								
05...	1350	1.84	13.1	440	260	6.6	2290	7.5
15...	752	1.02	44.7	250	110	5.0	1320	7.4
24...	1280	1.74	76.0	410	240	6.7	2240	7.3
SEP.								
05...	876	1.19	68.6	320	160	4.9	1600	6.7
15...	978	1.33	15.3	330	160	5.5	1760	8.1
25...	545	.74	112	200	77	3.7	978	6.8

07231500 - CANADIAN RIVER AT CALVIN, OKLA.--Continued

CHEMICAL ANALYSES OF ADDITIONAL SAMPLES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTAN-TANEOUS DIS-CHARGE (CFS)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
MAR.								
09...	160	390	.00	.00	.00	.0	.49	1120
23...	171	460	.00	.00	.00	.0	.60	1160
APR.								
05...	118	380	.16	.70	.00	.0	.71	1100
25...	423	140	.16	.70	.03	.1	.08	512
MAY								
09...	1200	210	.09	.40	--	--	.20	566
30...	198	390	.25	1.1	--	--	.33	1090
JUNE								
14...	700	290	.02	.10	--	--	.43	874
27...	67	300	.20	.90	--	--	.32	811
JULY								
11...	62	210	.05	.20	--	--	.28	610
28...	6.1	560	.14	.60	.00	.0	.21	1290
AUG.								
15...	22	310	.05	.20	.00	.0	.16	780
29...	3.3	330	.05	.20	.00	.0	.14	814
SEP.								
12...	18	230	.05	.20	.00	.0	.08	610
26...	55	280	.14	.60	.00	.0	.16	694
29...	31	--	--	--	--	--	--	--

07231500 CANADIAN RIVER AT CALVIN, OKLA.--Continued

CHEMICAL ANALYSES OF ADDITIONAL SAMPLES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	LOSS ON IGNI-TION (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
MAR.								
09...	15	140	1930	15.0	21	4.6	10	20
23...	15	340	2020	--	18	5.1	0	20
APR.								
05...	32	79	1800	20.0	30	7.5	10	20
25...	226	61	870	13.5	31	3.4	0	20
MAY								
09...	677	78	973	16.0	44	4.5	10	20
30...	28	140	1750	--	22	3.5	10	30
JUNE								
14...	112	86	1420	30.0	20	6.6	0	130
27...	16	107	1370	31.0	24	6.2	10	50
JULY								
11...	36	137	1020	30.0	21	4.2	10	30
28...	10	254	2180	28.0	23	4.4	10	50
AUG.								
15...	40	108	1300	33.0	23	4.5	0	70
29...	12	178	1380	25.0	20	3.8	0	50
SEP.								
12...	52	135	1650	28.0	20	3.7	10	40
26...	78	174	1170	27.0	20	4.6	--	--
29...	--	--	1850	25.0	--	--	0	110

FIELD ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION
MAR.					
09...	1700	8.9	15.0	9.2	95
23...	1800	8.2	21.0	--	--
APR.					
05...	1420	8.4	20.0	9.3	108
25...	750	8.1	13.5	9.2	92
MAY					
09...	1000	8.0	16.0	9.0	97
30...	1500	8.3	23.0	8.6	105
JUNE					
14...	1200	8.3	30.0	7.2	99
27...	1400	8.7	31.0	8.8	122
JULY					
11...	950	8.1	30.0	8.0	108
28...	1900	8.1	28.0	9.2	121
AUG.					
15...	1100	8.0	33.0	7.8	110
29...	1150	7.8	25.0	8.0	101
SEP.					
12...	1000	8.1	28.0	8.6	113
26...	1000	8.1	28.0	7.4	96
29...	1500	7.8	25.0	8.2	105

07231500 CANADIAN RIVER AT CALVIN, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1190	1100	1600	1360	1710	1800	1620	1070	1300	2470	2170	1410
2	1620	763	1650	1520	1790	1870	1720	814	1290	2290	2300	1420
3	839	756	1340	1370	1930	1920	1710	641	1260	1240	2300	1690
4	512	837	1290	1480	1940	1870	1720	726	1320	717	2300	1700
5	437	1000	1350	1620	1830	1920	1800	837	1310	1730	2290	1600
6	583	1180	1270	1580	1900	1920	1910	954	1310	1020	2370	1600
7	653	1180	1300	1550	1910	1900	1800	994	1510	1170	2430	1940
8	863	1270	1400	1600	1760	2100	2050	1450	1440	1070	2290	1610
9	---	1330	1330	1570	1760	2070	2070	760	1480	881	2340	376
10	---	1390	506	1660	1730	2150	2040	744	1480	918	629	718
11	---	1420	472	1660	1790	1910	1910	794	1460	1010	627	805
12	972	1420	602	1650	1680	1740	2040	624	1560	1090	840	1280
13	994	1460	768	1720	1750	1110	2020	568	1990	775	1220	1280
14	1170	1490	877	1740	1680	1100	1700	604	1740	1310	1220	---
15	1090	1430	457	1840	1690	1230	1160	550	1360	1270	1320	1760
16	1270	1530	535	1840	1740	1390	1890	765	1470	1260	1490	1910
17	1300	1610	634	1840	1680	1500	1890	839	1660	1370	1690	2020
18	949	701	709	1590	1830	1760	2070	904	1840	1520	1950	2050
19	946	1290	705	1650	1720	1760	2240	1040	1890	1640	1960	2160
20	386	1510	815	1750	1730	1720	1200	1040	1760	1720	1760	2300
21	463	1510	952	1750	1710	1700	2200	1100	1750	1830	2080	1840
22	475	1620	1100	1750	1730	2350	1140	1210	1800	1920	2200	916
23	503	1220	1190	1770	1700	1930	930	1240	1460	1940	2250	608
24	567	1260	1260	1790	1680	1900	679	1330	1410	1960	2240	606
25	592	1330	1390	1780	1700	1830	892	1360	1580	1980	---	978
26	884	1350	1380	1720	1770	1810	896	1440	1300	2040	1830	1140
27	1020	1370	1440	1780	1760	1700	799	1570	1360	2020	1610	1460
28	1020	1430	1530	1780	1760	2010	1040	1580	1450	2230	1610	1880
29	1040	1460	1530	1770	1790	1820	1080	1590	1620	2220	1410	1890
30	1020	1610	1270	1720	---	1740	1080	2060	3070	2220	1440	1840
31	1070	---	1520	1780	---	1700	---	1260	---	2160	1330	---
MONTH	872	1290	1100	1680	1760	1780	1590	1050	1570	1580	1780	1480

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.5	16.0	5.0	8.0	4.5	11.0	9.0	22.0	18.5	27.0	21.0	23.0
2	22.0	14.5	5.0	6.5	5.0	6.5	12.0	18.5	19.5	25.5	21.0	22.0
3	20.5	12.5	2.5	7.0	2.5	6.0	14.0	18.0	21.0	24.0	20.0	22.5
4	18.0	10.5	4.5	3.0	0.5	6.0	9.0	16.5	22.0	22.5	20.0	21.5
5	17.0	10.0	5.0	1.0	1.5	6.0	11.5	17.0	22.0	21.0	20.0	21.0
6	18.0	9.0	6.0	1.0	2.5	7.0	14.5	17.5	22.5	21.0	22.0	21.0
7	17.0	6.5	7.0	1.5	0.5	13.0	18.5	17.0	23.5	22.0	22.5	23.5
8	18.0	7.0	6.0	4.0	2.0	8.0	10.0	15.0	24.0	22.0	20.5	23.5
9	---	6.5	7.0	9.0	2.5	8.0	11.0	16.0	24.0	25.0	21.5	22.0
10	---	6.5	7.0	7.0	5.0	11.0	14.0	17.0	24.5	25.5	23.0	24.0
11	---	8.0	6.0	6.0	5.0	16.0	19.0	17.0	24.0	25.0	23.5	24.0
12	15.5	11.0	6.5	7.0	4.0	16.0	21.0	17.5	24.0	24.0	24.0	24.0
13	17.0	12.0	6.0	5.5	2.5	14.0	21.0	17.0	24.0	23.0	24.0	24.0
14	15.0	15.0	9.5	1.5	7.0	12.0	19.5	18.0	24.0	26.0	23.5	23.5
15	17.5	15.5	10.0	0.0	6.0	14.5	18.0	18.0	25.0	25.0	23.5	22.5
16	18.5	14.5	8.5	2.0	6.0	11.0	17.0	20.0	23.5	26.0	23.5	23.0
17	19.0	14.5	7.5	3.5	7.5	10.5	15.0	22.0	23.0	26.0	23.5	22.5
18	18.5	14.0	5.5	7.0	7.0	11.0	16.0	23.0	23.0	25.0	23.5	23.5
19	18.0	10.0	7.0	9.5	7.5	12.0	20.0	24.0	24.0	25.0	23.5	22.5
20	17.5	7.0	6.0	9.5	8.0	12.5	19.0	25.0	25.5	26.0	23.5	23.0
21	17.0	9.0	6.5	10.0	11.5	14.5	17.0	20.0	23.0	25.0	24.0	23.0
22	17.0	8.0	6.0	7.0	9.5	12.0	15.5	21.0	24.0	25.0	23.5	16.5
23	16.5	6.5	8.0	6.0	7.5	13.0	16.5	22.5	24.5	25.0	22.0	17.5
24	16.0	6.0	9.0	7.0	9.5	14.5	15.0	22.0	23.0	25.5	22.0	21.0
25	16.0	6.5	10.0	4.5	9.5	11.5	13.5	22.5	26.0	25.5	23.0	22.0
26	17.0	7.5	12.0	6.0	9.0	12.5	13.0	23.0	26.5	25.0	22.0	23.0
27	16.5	7.0	15.5	4.0	9.0	14.5	13.5	22.5	27.0	26.0	23.0	21.0
28	16.5	7.5	8.0	2.0	9.5	15.5	15.0	22.0	24.5	25.5	22.5	21.5
29	18.5	6.0	10.0	2.5	11.0	9.0	17.0	22.5	26.5	25.0	22.0	22.5
30	13.5	6.0	10.0	3.0	---	8.0	18.0	19.5	26.5	23.0	21.0	13.0
31	18.5	---	8.0	3.0	---	8.0	---	17.0	---	24.0	22.0	---
MONTH	17.5	9.5	7.5	5.0	6.0	11.0	15.5	19.5	24.0	24.5	22.5	22.0

07232500 BEAVER RIVER NEAR GUYMON, OKLA.

LOCATION.--Lat 36°43'24", long 101°29'30", in NW1/4SW1/4 sec.18, T.3 N., R.15 E., Texas County, at gaging station at bridge on U.S. Highway 64 at Dry Sand Draw, 1.2 mi (1.9 km) upstream from Goff Creek, 2.5 mi (4.0 km) north of Guymon, and at mile 650.7 (1,047.0 km).

DRAINAGE AREA.--2,139 sq mi (5,540 km²), includes that of Dry Sand Draw, of which 964 sq mi (2,496.8 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: Water years 1952-59 (partial-record station), November 1959 to September 1963, October 1967 to current year.
Water temperatures: November 1959 to September 1963.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
OCT.								
15...	.65	30	200	0	61	12	.40	278
NOV.								
04...	4.3	--	--	--	--	--	--	--
16...	1320	5.6	234	0	12	3.0	1.6	226
16...	960	--	--	--	--	--	--	--
18...	110	--	--	--	--	--	--	--
19...	39	--	--	--	--	--	--	--
DEC.								
10...	17	28	270	0	55	16	1.9	332
22...	10	--	--	--	--	--	--	--
JAN.								
17...	12	27	262	0	55	15	2.8	326
FEB.								
22...	7.4	30	272	0	61	17	2.0	346
MAR.								
06...	7.8	30	262	0	57	18	1.2	344
20...	5.0	32	256	0	60	18	1.9	336
APR.								
10...	6.0	32	244	0	55	18	1.0	316
MAY								
01...	2.0	33	276	0	56	17	1.6	348
11...	408	14	198	0	29	7.5	6.2	242
12...	223	--	--	--	--	--	--	--
13...	59	--	--	--	--	--	--	--
22...	9.3	--	--	--	--	--	--	--
30...	75	--	--	--	--	--	--	--
JUNE								
06...	6.2	--	--	--	--	--	--	--
22...	4.0	28	216	0	48	16	.20	287

DATE	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)
OCT.							
15...	.38	.49	180	16	1.0	466	7.6
NOV.							
04...	--	--	--	--	--	531	--
16...	.31	805	200	8	.2	387	7.6
16...	--	--	--	--	--	324	--
18...	--	--	--	--	--	481	--
19...	--	--	--	--	--	487	--
DEC.							
10...	.45	15.2	240	19	.8	551	8.2
22...	--	--	--	--	--	478	--
JAN.							
17...	.44	10.6	230	15	.8	538	8.1
FEB.							
22...	.47	6.91	240	17	.8	560	8.2
MAR.							
06...	.47	7.24	240	25	.8	554	8.0
20...	.46	4.54	230	20	.9	548	8.2
APR.							
10...	.43	5.12	210	10	1.0	524	8.1
MAY							
01...	.47	1.88	250	24	.9	578	8.0
11...	.33	266	170	8	.5	395	7.8
12...	--	--	--	--	--	397	--
13...	--	--	--	--	--	478	--
22...	--	--	--	--	--	567	--
30...	--	--	--	--	--	335	--
JUNE							
06...	--	--	--	--	--	517	--
22...	.39	3.10	190	13	.9	472	7.9

07234000 BEAVER RIVER AT BEAVER, OKLA.

LOCATION.--Lat 36°49'20", long 100°31'05", in SW1/4 sec.7, T.4 N., R.24 E., Beaver County, at gaging station at bridge on U.S. Highway 270 at Beaver, 1.5 mi (2.4 km) downstream from Home Creek, 5.0 mi (8.0 km) upstream from Clear Creek, and at mile 576.0 (926.8 km).

DRAINAGE AREA.--7,955 sq mi (20,603.4 km²), of which 4,270 sq mi (11,059.3 km²) is probably noncontributing.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
NOV.									
25...	150	100	38	310	246	0	200	450	4.6
DEC.									
05...	90	120	41	430	262	0	280	660	.90
15...	66	130	48	490	276	4	300	760	1.1
25...	59	160	40	530	276	0	320	800	1.3
JAN.									
05...	30	160	72	590	324	0	370	900	1.0
15...	25	150	68	580	304	0	340	860	1.2
25...	32	140	64	570	280	0	340	850	1.3
FEB.									
05...	35	140	61	560	274	0	340	860	2.0
15...	29	140	62	550	278	0	360	860	1.9
25...	21	150	56	600	252	0	340	940	1.3
MAR.									
05...	19	130	72	640	244	0	380	1000	1.0
15...	25	150	78	640	296	0	440	1000	1.4
25...	17	160	88	620	314	0	520	900	.60
APR.									
05...	14	140	72	660	236	0	440	1000	1.0
15...	7.0	160	80	700	240	0	470	1100	.80
25...	4.1	170	78	570	296	0	500	870	1.2
MAY									
05...	11	150	66	660	234	0	440	1000	1.6
15...	376	91	30	200	232	0	150	310	6.4
25...	59	130	68	550	276	0	340	870	1.2
JUNE									
05...	52	--	--	320	222	0	220	490	3.2
15...	68	--	--	280	200	6	180	440	2.9
25...	25	--	--	370	170	0	210	580	3.0
JULY									
05...	72	56	11	67	172	0	52	89	.20
15...	2.5	110	42	320	232	0	240	490	1.3
25...	2.3	70	19	160	160	0	120	240	5.6
AUG.									
16...	17	54	18	61	240	0	49	66	.90
25...	2980	49	11	36	180	0	44	38	.10
SEP.									
05...	62	110	40	370	248	0	200	560	2.1
15...	28	100	44	380	236	0	210	590	1.6
25...	8.3	140	68	560	252	0	340	890	1.6

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	837	2540	2620	3520	3630	3940	4320	2960	592	2250	1960	1250
2	915	3150	2630	3770	4330	3960	4160	3470	810	765	2390	1250
3	815	3150	2740	3780	4310	3960	4180	4010	1320	553	2610	2230
4	809	3180	2930	3970	3980	3960	3980	4010	1800	883	3230	2230
5	796	3240	2950	3890	3620	4060	4110	4090	2160	668	2290	2520
6	800	3250	3160	3950	3630	4130	3790	4140	2600	647	820	2720
7	796	3250	3110	3740	3730	4090	4330	4110	2920	965	1170	2910
8	805	3260	3190	3530	3560	4060	4320	4150	3160	1360	1740	2940
9	847	3250	3190	3680	3210	4070	4360	4160	3380	1810	2310	2990
10	872	3260	3270	3250	3600	4110	4380	1310	3440	2210	2450	3120
11	873	3270	3280	2920	3490	4220	4470	490	3570	2500	---	3460
12	856	3270	3310	3120	3400	4220	4890	606	3270	2800	---	1640
13	878	3430	3250	3310	3610	4030	4820	644	1970	2890	---	2210
14	903	3440	3220	3890	3960	4120	4600	1090	1150	1940	2470	2590
15	935	3200	3310	3720	3640	4160	4320	1540	1960	2240	2400	2600
16	969	---	3320	3720	3590	3900	4330	1970	2540	2840	671	3360
17	1000	402	3330	3340	3650	4220	4610	2290	2860	2780	392	3360
18	2300	476	3360	3600	3760	4020	4640	2550	3410	3170	551	3530
19	2240	538	3410	3690	3810	4000	4550	2820	3550	1330	1260	3510
20	1900	824	3450	3480	3810	4010	4420	2990	3740	1340	1260	3440
21	1640	1160	3440	3230	3900	4360	4400	3160	3760	485	1240	3580
22	1430	1420	3420	3310	3910	4120	3900	3310	3920	645	1190	3690
23	1310	1770	3440	3440	3680	4170	4470	3250	3340	805	1530	3810
24	1270	1980	3460	3630	3860	4040	4440	3440	2670	972	389	3800
25	1260	2150	3460	3700	3840	4000	3770	3590	2380	1220	485	3710
26	1900	2320	3460	3790	3870	4100	4300	3290	860	1670	468	3620
27	1970	2420	3480	4420	3870	4400	4590	3290	1000	970	768	3660
28	1890	2500	3480	4210	3870	4030	4630	2650	1370	1040	956	3710
29	2990	2650	3480	4050	3890	4170	2210	2630	1650	1800	1070	3740
30	2440	2730	3540	3840	---	3960	2500	1280	1870	1810	938	3700
31	2910	---	3550	3760	---	3900	---	563	---	2300	930	---
MONTH	1360	2460	3270	3650	3760	4080	4230	2700	2430	1600	1430	3030

07234000 BEAVER RIVER AT BEAVER, OKLA.

PERIOD OF RECORD.--Chemical analyses: Water years 1958-59 (partial-record station), November 1961 to September 1963, October 1967 to current year.
Water temperatures: October 1967 to current year.

REMARKS.--No flow Oct. 1-29, 31, Nov. 3-15, Aug. 1-5, 7-15, 19-23.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)
NOV.								
25...	1330	1.81	539	420	220	6.7	2150	8.1
DEC.								
05...	1800	2.45	481	470	260	8.6	2880	8.3
15...	2010	2.73	358	530	300	9.3	3250	8.4
25...	2140	2.91	341	560	330	9.7	3390	8.3
JAN.								
05...	2470	3.36	200	690	420	9.7	3840	8.1
15...	2300	3.13	155	660	410	9.5	3650	8.1
25...	2330	3.17	201	610	380	10	3650	8.2
FEB.								
05...	2190	2.98	207	600	360	9.6	3560	8.3
15...	2280	3.10	178	600	370	9.7	3580	8.2
25...	2390	3.25	136	610	400	11	3810	8.2
MAR.								
05...	2480	3.37	127	620	420	11	3940	8.1
15...	2660	3.62	180	690	450	11	4060	8.2
25...	2600	3.54	119	760	500	9.8	3960	8.2
APR.								
05...	2690	3.66	102	650	460	11	4110	8.0
15...	2740	3.73	51.8	720	520	11	4320	7.7
25...	2520	3.43	27.9	750	510	9.1	3770	8.0
MAY								
05...	2650	3.60	78.7	640	450	11	4090	7.5
15...	1020	1.39	1040	350	160	4.6	1540	8.0
25...	2250	3.06	358	610	380	9.7	3560	7.8
JUNE								
05...	1330	1.81	187	400	220	7.0	2160	7.7
15...	1200	1.63	156	370	200	6.3	1950	8.5
25...	1440	1.96	97.2	380	240	8.3	2380	7.7
JULY								
05...	409	.56	79.5	180	39	2.2	664	7.3
15...	1390	1.89	9.38	460	270	6.6	2230	7.3
25...	758	1.03	4.71	260	130	4.4	1220	7.1
AUG.								
16...	404	.55	18.5	210	13	1.8	671	7.8
25...	310	.42	2490	170	22	1.1	485	7.5
SEP.								
05...	1520	2.07	254	440	240	7.7	2520	7.8
15...	1600	2.18	121	440	250	8.0	2600	7.3
25...	2270	3.09	50.9	610	400	9.8	3710	7.4

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.5	13.5	3.0	5.5	3.0	8.0	17.5	23.5	26.0	32.0	33.5	20.5
2	19.0	9.5	2.0	6.0	0.0	10.0	17.0	24.0	30.5	31.0	28.5	23.5
3	22.0	11.5	3.5	0.5	0.0	12.5	15.5	24.0	26.5	21.0	26.5	22.0
4	22.5	14.0	5.0	0.0	1.5	13.5	16.5	24.5	26.5	20.0	33.0	21.5
5	18.0	8.5	4.0	0.5	4.5	13.0	25.0	22.0	30.5	21.5	25.5	26.5
6	18.0	10.0	5.5	1.0	3.5	18.0	19.0	21.0	31.0	27.0	30.5	28.5
7	18.0	10.0	2.5	1.0	6.5	13.5	23.0	22.5	30.5	30.0	29.0	31.5
8	15.5	11.5	3.5	4.5	9.5	14.0	21.5	23.0	29.0	31.5	24.0	22.5
9	12.5	11.0	6.0	7.5	8.0	19.0	22.5	21.0	30.0	27.5	30.5	26.0
10	16.5	12.0	7.5	7.0	0.5	19.5	27.0	13.5	25.5	30.5	31.5	29.5
11	16.5	13.0	9.0	6.0	1.0	20.0	21.5	15.0	28.5	30.5	---	29.0
12	16.0	14.5	7.5	6.0	8.0	21.0	19.0	19.0	29.5	35.0	---	28.0
13	15.5	10.0	8.0	0.5	10.0	19.0	20.0	18.5	27.5	33.5	---	28.5
14	18.0	10.5	5.0	0.5	9.5	20.5	22.5	21.5	31.0	32.5	24.5	21.5
15	17.5	15.0	8.0	1.0	10.5	17.0	14.0	25.0	29.5	27.5	25.0	24.0
16	20.5	---	6.5	2.0	12.5	16.0	22.0	27.0	29.5	25.5	29.5	29.0
17	20.5	12.5	6.5	3.0	11.5	15.5	20.0	28.5	27.5	24.0	29.0	29.5
18	15.5	7.5	7.0	7.5	12.0	19.5	23.0	27.0	28.5	27.0	30.0	29.0
19	13.0	8.0	6.5	9.0	14.5	21.0	22.5	23.5	33.0	28.5	29.5	27.5
20	15.0	10.0	7.0	9.5	16.5	19.0	13.0	25.5	27.0	27.0	25.0	24.5
21	15.5	11.0	8.0	9.0	12.0	20.5	21.0	28.0	30.5	27.0	24.0	22.0
22	15.0	6.0	8.5	12.0	5.5	21.0	22.5	29.5	27.5	29.5	27.5	24.0
23	14.0	8.0	11.5	13.0	14.5	12.0	20.5	29.0	30.0	28.5	25.5	24.5
24	17.5	7.5	9.0	8.5	13.5	17.5	23.0	26.0	32.0	24.5	21.5	26.0
25	18.0	11.0	13.5	6.0	11.0	20.0	13.0	27.5	32.5	31.5	22.0	25.5
26	18.5	10.0	13.0	0.0	12.5	19.5	18.0	25.5	32.0	32.5	21.5	18.0
27	16.5	9.0	5.0	0.0	15.5	17.5	19.0	26.0	34.0	36.0	23.0	26.0
28	14.0	5.5	9.0	0.5	18.0	5.5	21.0	25.5	33.0	33.0	22.0	22.0
29	7.0	4.5	8.5	1.0	18.0	14.5	17.0	25.0	26.0	33.5	25.0	18.5
30	9.0	4.5	9.5	2.0	---	13.0	21.5	23.0	33.0	34.0	27.5	19.0
31	12.0	---	8.0	2.0	---	13.0	---	23.5	---	32.0	29.5	---
MONTH	16.5	10.0	7.0	4.5	9.0	16.0	20.0	24.0	29.5	29.0	27.0	25.0

07238500 CANTON LAKE NEAR CANTON, OKLA.

LOCATION.--Lat 36°05'03", long 98°36'05", in SE1/4NE1/4 sec.32, T.19 N., R.13 W., Blaine County, near right end of Canton Dam on North Canadian River, 2.0 mi (3.2 km) northwest of Canton, and at mile 394.3 (634.4 km).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	RESER-VOIR STORAGE (AC-FT)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)
OCT.								
02...	40500	230	152	0	280	320	.00	.00
18...	39800	230	154	0	280	330	.00	.00
NOV.								
03...	40400	230	172	0	280	320	.00	.00
DEC.								
15...	65000	170	172	0	210	250	.00	.00
JAN.								
15...	73900	190	200	0	230	270	.05	.20
FEB.								
15...	79700	180	196	0	220	270	.18	.80
MAR.								
01...	75900	190	204	0	220	280	.07	.30
14...	76900	190	208	0	230	280	.18	.80
APR.								
15...	75200	200	216	0	230	290	.14	.60
MAY								
01...	71800	200	220	0	220	290	.14	.60
31...	90900	190	206	0	200	260	.02	.10
JUNE								
14...	94400	190	198	0	210	270	.05	.20
JULY								
01...	77300	200	194	0	210	270	.11	.50
SEP.								
01...	88000	180	190	0	210	260	.02	.10
15...	84300	170	182	0	190	240	.09	.40

07238500 CANTON LAKE NEAR CANTON, OKLA.

DRAINAGE AREA.--12,483 sq mi (32,331.0 km^2), of which 4,883 sq mi (12,647.0 km^2) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1951 to September 1954, December 1955 to September 1963, October 1967 to current year.
Water temperatures: October 1951 to September 1954.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.							
02...	1080	1.47	370	250	5.2	1750	7.7
18...	1090	1.48	380	250	5.1	1780	7.8
NOV.							
03...	1080	1.47	380	240	5.1	1760	7.8
DEC.							
15...	862	1.17	330	190	4.1	1420	7.8
JAN.							
15...	942	1.28	360	200	4.4	1540	7.6
FEB.							
15...	960	1.31	380	220	4.0	1520	8.2
MAR.							
01...	960	1.31	370	200	4.3	1550	7.7
14...	980	1.33	390	220	4.2	1560	7.4
APR.							
15...	1050	1.43	390	210	4.4	1650	7.8
MAY							
01...	1010	1.37	390	210	4.4	1660	8.1
31...	926	1.26	360	190	4.4	1520	8.0
JUNE							
14...	926	1.26	350	190	4.4	1540	7.9
JULY							
01...	924	1.26	350	190	4.7	1540	8.0
SEP.							
01...	878	1.19	340	180	4.2	1480	7.4
15...	850	1.16	320	170	4.1	1410	7.4

07241550 NORTH CANADIAN RIVER NEAR HARRAH, OKLA.

LOCATION.--Lat 35°30'01", long 97°11'37", in SW1/4NW1/4 sec.22, T.12 N., R.1 E., Oklahoma County, at gaging station at bridge on county road, 2.2 mi (3.5 km) northwest of Harrah, 3.8 mi (6.1 km) downstream from Choctaw Creek, and at mile 230.0 (370.1 km).

DRAINAGE AREA.--13,501 sq mi (34,967.6 km^2), of which 4,899 sq mi (12,688.4 km^2) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1968 to current year.
Water temperatures: October 1968 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-CHARGE (CFS)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)
OCT.								
01-02	84	280	284	10	110	470	9.2	8.7
03-05	189	140	124	0	53	240	12	6.1
06-19	73	280	214	0	140	400	36	24
20-22	161	69	125	2	64	100	--	--
23-27	75	250	214	0	120	380	36	21
28-29	136	110	118	0	51	180	15	10
30-31	72	140	182	8	94	200	4.7	3.5
NOV.								
01-10	60	270	208	0	130	370	56	59
11-20	59	280	234	0	140	390	40	65
21-30	57	270	236	0	140	370	32	30
DEC.								
01-04	81	250	208	0	150	370	50	23
05-06	116	150	156	0	77	240	26	9.9
07-09	125	180	186	0	97	290	33	15
10-12	180	64	132	0	38	95	16	5.4
13-14	85	180	192	0	90	290	35	15
15...	616	100	138	0	50	170	19	8.3
16-17	300	50	130	0	41	64	13	3.1
18-19	82	140	194	0	69	220	26	8.5
20-31	70	220	236	0	100	350	38	19
JAN.								
01...	74	120	156	0	65	170	2.6	15
02-09	61	230	220	0	120	340	39	13
10-20	64	260	224	0	14	380	43	16
21-31	64	250	226	0	130	380	27	16
FEB.								
01-11	85	250	276	0	120	370	21	20
12...	101	360	248	0	110	590	50	18
13-20	118	250	256	0	110	360	36	16
21-29	91	230	268	0	130	320	71	22
MAR.								
01-10	77	220	240	0	130	330	18	24
11-20	66	240	240	0	150	340	40	27
21-24	127	180	194	0	110	270	28	16
25-26	146	84	132	0	55	120	15	6.6
27-31	73	180	210	0	120	280	40	19
APR.								
01-10	65	240	232	0	140	340	55	26
11-15	63	250	236	0	160	360	38	37
16...	187	240	234	0	170	330	29	19
17...	81	120	134	0	80	170	15	8.4
18-21	107	210	212	0	180	300	5.3	19
22...	148	68	156	0	33	97	7.9	5.3
23-27	77	200	196	0	140	290	37	6.0
28...	337	51	136	0	32	74	3.5	4.7
29-30	276	85	132	0	53	120	13	4.9
MAY								
01-02	168	68	148	0	73	100	12	4.4
03-07	101	210	210	0	120	310	15	19
08-09	118	88	126	0	52	120	16	8.4
10-12	220	200	218	0	110	290	25	22
13-14	838	41	138	0	35	59	9.0	2.3
15-16	146	150	196	0	72	230	15	7.2
17-28	98	270	248	0	140	390	19	21
29...	111	120	136	0	50	190	11	7.6
30-31	168	64	116	0	43	92	10	5.1
JUNE								
01-10	72	250	232	0	160	360	16	17
11-20	66	250	228	0	170	350	19	22
21-24	77	250	212	0	170	350	26	25
25-26	103	120	130	0	110	170	11	11
27-30	93	190	170	0	160	280	18	14
JULY								
01-02	64	260	216	0	150	360	16	17
03-04	878	43	124	0	32	62	4.3	4.1
05-06	204	77	124	0	54	110	13	4.8
07-08	89	170	186	0	78	250	24	12
09-20	67	250	214	0	140	350	25	19
21-31	41	270	206	0	170	350	24	20
AUG.								
01-10	40	240	188	0	180	330	23	8.9
11...	67	120	136	0	85	180	11	7.2
12-20	52	240	180	0	180	320	18	11
21-25	51	260	180	0	200	350	22	12
26-31	82	190	154	0	140	260	19	9.2
SEP.								
01-04	74	190	164	0	140	250	22	18
05-12	59	230	188	0	160	310	25	21
13-21	53	240	184	0	180	320	26	25

07241550 NORTH CANADIAN RIVER NEAR HARRAH, OKLA.

EXTREMES, Current year.--Dissolved solids: Maximum, 1.320 mg/l Oct. 1-2; minimum, 270 mg/l July 3-4.
Hardness: Maximum, 460 mg/l Oct. 1-2; minimum, 130 mg/l July 3-4.
Specific conductance: Maximum daily, 3,410 micromhos Oct. 4; minimum daily, 355 micromhos July 4.
Water temperatures: Maximum, 32°C June 29-30; minimum, 2°C Jan. 4, Feb. 3.

Period of record.--Dissolved solids: Maximum, 1.710 mg/l Dec. 23, 1969; minimum, 167 mg/l Sept. 24, 1970.
Hardness: Maximum, 525 mg/l Dec. 23, 1969; minimum, 88 mg/l Sept. 24, 1970.
Specific conductance: Maximum daily, 3,410 micromhos Oct. 4, 1971; minimum daily, 268 micromhos Sept. 24, 1970.
Water temperatures: Maximum, 35.0°C July 11, Aug. 9, 1960; minimum, freezing point Jan. 1, 1969.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.								
01-02	1320	1.80	299	460	210	5.7	2180	8.5
03-05	636	.86	324	200	98	4.3	1090	7.2
06-19	1120	1.52	221	310	130	6.9	1940	7.5
20-22	401	.55	174	170	64	2.3	699	8.4
23-27	1060	1.44	215	310	130	6.2	1830	7.2
28-29	500	.68	184	160	63	3.8	850	8.2
30-31	690	.94	134	270	110	3.6	1180	8.5
NOV.								
01-10	1120	1.52	181	320	150	6.6	1900	7.6
11-20	1170	1.59	186	350	160	6.5	1950	7.8
21-30	1120	1.52	172	340	150	6.4	1880	7.8
DEC.								
01-04	1090	1.48	238	350	180	5.8	1860	7.9
05-06	692	.94	217	240	110	4.2	1220	7.5
07-09	800	1.09	270	320	170	4.4	1440	7.6
10-12	356	.48	173	150	42	2.3	637	7.8
13-14	800	1.09	184	290	130	4.6	1440	7.8
15...	516	.70	858	200	87	3.1	906	8.0
16-17	304	.41	246	140	33	1.8	528	8.0
18-19	700	.95	155	260	100	3.8	1210	7.5
20-31	952	1.29	180	340	150	5.2	1710	7.5
JAN.								
01...	555	.75	110	180	52	3.9	952	7.2
02-09	992	1.35	163	330	150	5.5	1670	7.3
10-20	1120	1.52	194	350	170	6.0	1860	7.2
21-31	1100	1.50	190	350	170	5.8	1860	--
FEB.								
01-11	1100	1.50	252	340	110	5.9	1880	7.7
12...	1410	1.92	384	440	240	7.5	2520	7.2
13-20	1020	1.39	325	300	90	6.3	1780	7.4
21-29	1020	1.39	251	340	120	5.4	1740	7.6
MAR.								
01-10	1090	1.48	227	340	140	5.2	1690	8.2
11-20	1140	1.55	203	350	150	5.6	1740	7.8
21-24	928	1.26	318	280	120	4.7	1410	7.1
25-26	512	.70	202	160	52	2.9	754	7.2
27-31	1010	1.37	199	320	150	4.4	1480	8.2
APR.								
01-10	1090	1.48	191	330	140	5.7	1740	7.5
11-15	1120	1.52	190	350	160	5.8	1840	7.4
16...	1070	1.46	540	340	150	5.7	1750	7.2
17...	535	.73	117	180	70	3.9	921	7.0
18-21	1010	1.37	292	330	160	5.0	1620	7.3
22...	375	.51	150	154	26	2.4	637	7.0
23-27	934	1.27	194	300	140	5.0	1520	7.3
28...	297	.40	270	140	28	1.9	521	7.0
29-30	441	.60	329	156	48	3.0	731	7.2
MAY								
01-02	436	.59	198	190	69	2.1	734	7.8
03-07	948	1.29	259	310	140	5.2	1610	7.8
08-09	435	.59	138	160	57	3.0	758	7.7
10-12	890	1.21	529	280	100	5.2	1510	7.4
13-14	300	.41	679	140	27	1.5	499	7.9
15-16	732	1.00	289	270	110	4.0	1250	7.6
17-28	1140	1.55	302	350	150	6.3	1900	7.6
29...	562	.76	167	190	78	3.8	968	7.3
30-31	356	.48	161	140	45	2.4	601	7.8
JUNE								
01-10	1100	1.50	218	330	140	6.0	1780	7.4
11-20	1080	1.47	192	320	130	6.1	1760	7.3
21-24	1100	1.50	229	320	150	6.1	1780	7.4
25-26	605	.82	168	200	93	3.7	986	7.0
27-30	888	1.21	223	270	130	5.0	1440	7.1
JULY								
01-02	1030	1.40	178	310	130	6.4	1790	7.2
03-04	270	.37	640	130	28	1.6	474	7.5
05-06	407	.55	224	160	58	2.6	692	7.6
07-08	780	1.01	179	260	110	4.6	1300	7.5
09-20	1050	1.43	190	320	140	6.1	1800	7.5
21-31	1060	1.44	117	300	130	6.8	1810	7.5
AUG.								
01-10	1030	1.40	111	290	140	6.1	1730	8.1
11...	574	.78	104	200	88	3.7	978	7.4
12-20	1000	1.36	140	300	150	6.0	1670	7.7
21-25	1120	1.52	154	310	160	6.4	1820	7.5
26-31	858	1.17	190	250	120	5.2	1400	7.6
SEP.								
01-04	806	1.10	161	240	110	5.3	1360	7.9
05-12	966	1.31	154	280	130	6.0	1640	7.4
13-21	998	1.36	143	270	120	6.4	1690	7.2

07241550 NORTH CANADIAN RIVER NEAR HARRAH, OKLA.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-CHARGE (CFS)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)
SEP.								
22...	150	130	120	0	95	180	9.4	7.8
23...	82	94	104	0	80	130	18	18
24-30	64	250	168	0	220	330	5.9	18
WTD. AVG.	--	188	193	0	109	271	25	17
TIME WTD. AVG.	93	223	208	0	129	319	28	20
TOT. LOAD (TONS)	--	17200	17800	10	9970	24900	2220	1500

CHEMICAL ANALYSES OF ADDITIONAL SAMPLES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTAN-TANEOUS DIS-CHARGE (CFS)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT.										
15...	--	--	--	--	--	--	10	--	--	--
25...	63	--	--	--	--	--	10	--	--	--
NOV.										
04...	57	50	5.1	10	35	2	40	24	4	9
DEC.										
21...	61	39	6.2	80	380	4	10	29	8	40
JAN.										
19...	70	42	6.4	70	330	10	0	21	5	60
FEB.										
24...	86	38	7.5	120	420	--	0	24	4	70
MAR.										
29...	66	38	6.7	35	490	4	10	15	3	20
APR.										
19...	93	69	14	120	510	5	0	16	5	20
MAY										
18...	102	62	13	20	120	8	10	31	5	20
JUNE										
15...	81	69	19	20	--	10	10	22	18	40
JULY										
20...	56	58	14	70	20	1	0	20	7	30
AUG.										
31...	78	37	16	20	30	1	10	20	19	60
SEP.										
13...	52	**	25	20	10	0	0	20	2	20

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2040	1900	1850	967	1920	1660	1620	735	---	---	1710	1150
2	2170	1910	1840	1480	1800	1800	1680	722	1630	1790	1750	1610
3	992	2040	1840	1690	1810	1790	1760	1250	1760	560	1760	1620
4	---	2030	2000	1560	1810	1960	1800	1620	1880	355	1810	1030
5	1090	1980	1170	1820	2110	1690	1900	1710	1790	707	1780	1520
6	1690	1950	1260	1780	2260	1710	1790	2090	1800	668	1870	1860
7	1810	2080	1380	1690	1860	1670	1830	1480	1830	1110	1560	1890
8	2020	1990	1300	1780	1810	1750	1840	639	1920	1480	1560	1640
9	2010	1950	1650	1760	1710	1750	1850	867	1880	1670	1630	1620
10	1970	1990	627	1910	1730	1660	1800	1390	---	1660	1640	1660
11	1940	1960	525	2040	1810	1730	1780	1660	1870	1750	978	1680
12	1920	1940	736	2120	2520	1760	1910	1530	1890	1800	1550	1610
13	1980	1990	1380	1960	1840	1800	1860	416	1850	1800	1640	1630
14	1920	1970	1560	1960	2300	1810	1940	579	1850	1760	1650	1700
15	1940	1940	906	1960	1570	1780	1900	1030	1820	1830	1620	1690
16	1890	1960	398	1900	1620	1830	1750	1460	1940	1840	1450	1750
17	1940	1940	608	1810	1730	1840	927	1760	1790	1820	1490	1640
18	1980	1920	1030	1690	1810	1780	1420	1840	1450	1800	1920	1740
19	2300	2100	1410	1750	1780	1750	1790	1920	1730	1820	1840	1680
20	810	1980	1550	1830	1730	1780	1760	1870	1660	1830	1760	1710
21	641	1840	1650	1830	1710	1800	1650	1910	1830	1820	1800	1640
22	738	1920	1710	1720	1850	1300	637	1940	1940	1830	1760	983
23	1500	1850	1720	1820	1780	1270	1080	1970	1740	1780	1740	771
24	1740	1690	1760	1890	1530	1390	1460	1970	1700	1770	1990	1540
25	1830	1890	1760	1920	1770	731	1670	1990	1080	1780	1770	1810
26	2070	1750	1820	1840	1900	806	1730	1940	905	1740	1410	1760
27	1910	1830	1800	1930	1890	1310	1600	1930	1360	1800	1000	1780
28	803	1930	1940	1920	1750	1480	521	1860	1730	1880	1660	1800
29	868	1830	1900	2130	1620	1520	675	952	1380	1820	1560	1760
30	1570	1830	1710	1940	---	1690	790	637	1380	1860	1530	1830
31	1770	---	1400	1890	---	1660	---	557	---	1770	1220	---
MONTH	1720	1930	1430	1820	1840	1620	1560	1430	1690	1600	1630	1590

07241550 NORTH CANADIAN RIVER NEAR HARRAH, OKLA.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
SEP.								
22...	569	.77	230	180	82	4.2	983	6.7
23...	444	.60	98.3	160	75	3.2	771	6.9
24-30	1050	1.43	181	310	170	6.2	1740	7.8
WTD. AVG.	844	1.15	--	271	112	4.8	1410	7.6
TIME WTD. AVG.	976	1.33	--	302	132	5.5	1630	7.6
TOT. LOAD (TONS)	77500	--	--	--	--	--	--	--

FIELD ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION
NOV.					
04...	1950	8.1	14.5	8.4	88
DEC.					
21...	1500	8.0	5.0	11.1	92
JAN.					
19...	1740	7.9	12.0	9.2	92
FEB.					
24...	1680	7.9	10.0	8.7	83
MAR.					
29...	1850	8.1	11.0	9.2	89
APR.					
19...	1640	7.7	20.0	4.7	56
MAY					
18...	2000	8.1	24.5	9.4	119
JUNE					
15...	1800	8.2	25.5	8.2	106
JULY					
20...	1450	8.2	27.0	7.7	101
AUG.					
31...	1120	7.0	23.0	5.2	64
SEP.					
13...	1590	--	30.0	15.5	212

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.0	16.0	5.0	9.5	6.0	15.5	9.5	19.0	27.0	26.5	24.5	24.0
2	20.0	13.0	5.5	7.0	6.0	5.0	12.5	17.0	29.5	24.5	24.0	23.0
3	19.0	12.0	3.5	7.0	2.0	7.0	15.0	17.5	31.0	22.5	24.0	20.5
4	---	10.5	5.5	2.0	2.5	7.5	10.0	18.0	24.0	21.5	25.5	23.5
5	22.0	11.0	5.5	3.0	4.0	7.5	12.0	18.0	24.0	21.0	26.0	23.0
6	23.5	11.0	6.0	2.5	7.0	8.5	18.0	19.0	24.0	21.0	25.5	22.0
7	17.0	8.0	7.0	3.5	2.5	12.5	19.0	17.5	24.5	22.0	24.0	25.5
8	19.0	9.0	8.0	7.0	4.0	10.0	14.0	15.5	25.5	21.5	23.5	25.5
9	15.5	7.5	8.0	11.5	5.0	9.5	12.5	17.5	24.0	23.0	24.0	25.0
10	15.5	8.5	7.0	7.5	7.0	11.5	16.5	18.0	---	24.5	24.0	25.5
11	15.0	9.0	6.0	7.0	7.0	15.5	20.0	17.5	24.5	24.5	24.0	25.5
12	17.5	11.5	---	7.5	---	17.0	21.5	18.0	25.0	24.5	24.5	24.5
13	10.5	13.0	5.0	6.5	5.0	15.5	22.0	17.5	24.0	23.5	24.5	25.0
14	16.5	14.5	11.0	3.5	---	14.0	21.0	18.0	24.0	25.0	25.0	25.0
15	19.0	16.5	9.5	2.5	6.5	16.5	19.5	19.0	25.0	25.0	24.5	24.5
16	20.0	16.0	8.0	4.5	6.5	15.0	16.0	21.0	23.5	26.0	26.0	25.0
17	20.5	15.0	8.0	3.0	8.5	15.5	17.0	22.0	24.0	25.0	26.5	24.0
18	21.5	12.0	7.5	8.0	8.0	13.5	15.5	23.0	24.0	25.0	27.0	24.5
19	19.5	12.0	8.5	10.0	6.0	14.0	21.5	23.0	25.0	24.5	27.0	25.0
20	18.0	9.5	7.5	10.5	7.0	15.5	19.5	22.5	25.0	25.5	26.0	24.0
21	17.0	10.0	7.0	9.0	7.0	15.0	17.0	22.5	18.0	25.5	25.5	22.5
22	17.0	8.0	7.0	9.0	9.5	15.0	24.0	23.0	23.5	25.5	25.0	18.5
23	15.5	6.5	8.0	8.0	8.5	15.0	23.0	23.0	24.5	25.5	22.5	18.0
24	15.5	6.5	10.0	9.5	12.0	14.5	15.5	22.0	23.0	26.0	23.0	21.0
25	15.0	7.5	11.0	7.5	11.5	11.5	15.0	23.5	30.0	26.5	23.5	22.0
26	18.0	8.5	13.0	6.0	9.5	13.0	13.5	24.0	26.5	31.5	23.5	23.0
27	14.5	7.5	15.0	5.0	8.5	14.5	14.5	24.0	27.0	25.5	23.0	22.0
28	15.5	9.5	13.5	5.0	11.0	13.5	14.5	22.5	27.0	25.0	24.0	21.5
29	19.0	6.0	10.5	2.5	15.0	8.0	17.5	23.0	32.0	24.0	23.5	22.5
30	18.5	5.5	10.0	3.0	---	9.0	18.0	24.0	32.0	23.0	21.5	14.5
31	13.0	---	9.0	8.5	---	9.0	---	19.5	---	24.0	23.0	---
MONTH	18.0	10.5	8.0	6.5	7.0	12.5	17.0	20.5	25.5	24.5	24.5	23.0

07242000 NORTH CANADIAN RIVER NEAR WETUMKA, OKLA.

LOCATION.--Lat 35°15'53", long 96°12'25", in center of SW1/4 sec.12, T.9 N., R.10 E., Hughes County, at gaging station at bridge on U.S. Highway 75, 2.3 mi (3.7 km) upstream from Wewoka Creek, 2.5 mi (4.0 km) northeast of Wetumka, and at mile 84.4 (135.8 km).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	PHOSPHATE (PO4) (MG/L)
OCT.								
05...	930	31	86	0	17	43	4.0	1.6
15...	127	170	234	0	71	260	1.0	2.9
25...	340	120	136	0	36	210	7.0	1.8
NOV.								
05...	155	130	248	0	52	220	5.1	4.3
15...	127	200	326	0	73	320	6.4	4.4
25...	140	190	310	0	94	320	8.0	3.3
DEC.								
05...	154	180	286	0	75	290	13	6.7
15...	8650	15	68	0	11	23	3.0	.44
25...	292	110	230	0	37	200	7.2	1.2
JAN.								
05...	260	120	246	0	41	220	8.7	3.2
15...	192	190	298	0	65	330	18	5.4
25...	184	210	304	0	66	350	17	1.3
FEB.								
05...	192	210	288	0	78	360	17	6.9
15...	235	190	236	0	65	340	14	5.6
25...	169	200	288	0	49	360	9.0	3.2
MAR.								
05...	159	250	324	0	110	420	28	2.3
15...	365	120	158	0	39	220	1.0	2.7
25...	195	220	250	0	59	420	4.2	2.6
APR.								
05...	156	180	220	0	77	300	4.4	1.6
15...	125	200	242	0	98	330	4.7	1.6
25...	530	82	148	0	48	130	7.9	3.6
MAY								
05...	425	100	168	0	54	160	14	3.7
15...	840	41	136	0	26	64	7.2	2.1
25...	180	160	260	0	60	280	6.3	2.2
JUNE								
05...	152	200	224	0	100	310	12	3.1
15...	93	200	310	0	70	350	4.5	3.6
25...	145	160	232	0	68	260	5.4	3.8
JULY								
05...	1020	32	82	0	10	54	4.1	.88
13...	205	93	168	0	67	140	5.0	3.4
25...	66	190	268	0	86	300	2.3	2.4
AUG.								
05...	45	230	348	0	100	360	0.0	2.8
15...	52	190	276	0	80	300	3.7	2.6
25...	35	170	312	0	56	270	2.8	2.1
SEP.								
05...	69	200	216	0	130	380	3.9	6.6
15...	51	210	204	0	120	300	5.6	1.7
25...	39	180	288	6	70	290	2.4	1.8

07242000 NORTH CANADIAN RIVER NEAR WETUMKA, OKLA.

DRAINAGE AREA.--14,290 sq mi (37,011.1 km²), of which 4,899 sq mi (12,688.4 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: Water year 1952 (partial-record station), October to current year. Water tempertures: October 1953 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.								
05...	183	.25	460	80	9	1.5	309	8.0
15...	765	1.04	262	270	78	4.5	1300	8.0
25...	540	.73	496	190	78	3.8	971	7.6
NOV.								
05...	668	.91	280	280	77	3.4	1160	8.1
15...	948	1.29	325	380	110	4.5	1600	8.1
25...	958	1.30	362	380	130	4.2	1590	8.1
DEC.								
05...	872	1.19	362	350	120	4.2	1500	7.9
15...	138	.19	3220	64	8	.8	213	7.1
25...	612	.83	482	260	71	3.0	1060	7.8
JAN.								
05...	658	.89	462	290	88	3.1	1160	7.8
15...	946	1.29	490	380	140	4.2	1620	7.7
25...	1020	1.39	507	400	150	4.6	1730	7.7
FEB.								
05...	1000	1.36	518	390	150	4.6	1720	7.7
15...	908	1.23	576	330	140	4.6	1580	7.6
25...	952	1.29	434	360	120	4.6	1660	7.9
MAR.								
05...	1140	1.55	489	430	160	5.2	1990	7.6
15...	572	.78	564	220	90	3.5	1030	7.4
25...	978	1.33	515	360	160	5.0	1770	7.7
APR.								
05...	854	1.16	854	300	120	4.5	1420	7.1
15...	980	1.33	331	320	120	4.9	1570	6.9
25...	466	.63	667	190	69	2.6	760	7.0
MAY								
05...	528	.72	606	200	62	3.1	888	7.7
15...	285	.39	646	140	28	1.5	486	7.7
25...	804	1.09	391	320	110	3.9	1380	7.9
JUNE								
05...	858	1.17	352	310	130	4.9	1460	7.3
15...	994	1.35	250	370	120	4.5	1660	7.4
25...	766	1.04	300	280	90	4.2	1300	7.0
JULY								
05...	200	.27	551	88	21	1.5	332	7.1
13...	498	.68	276	210	72	2.8	845	7.4
25...	884	1.20	158	320	100	4.6	1460	7.7
AUG.								
05...	1050	1.43	128	400	120	5.0	1780	7.5
15...	854	1.16	120	330	100	4.6	1490	7.3
25...	796	1.08	75.2	330	74	4.1	1390	7.1
SEP.								
05...	886	1.20	165	280	100	5.2	1520	7.1
15...	876	1.19	121	260	93	5.6	1510	8.0
25...	872	1.19	91.8	330	84	4.3	1460	8.5

07242000 NORTH CANADIAN RIVER NEAR WETUMKA, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	629	1450	1720	1550	1740	1850	1230	554	1700	1310	1650	1500
2	772	1620	1780	1220	1770	1850	1210	762	1830	1550	1740	1420
3	407	1530	1780	1220	1770	1850	1300	495	1830	1540	1780	1420
4	496	1170	1600	1170	1720	1890	1410	570	1440	323	1780	1520
5	304	1170	1510	1160	1760	2010	1420	890	1450	332	1790	1520
6	544	1390	1530	1500	1770	1890	1460	767	1250	279	1690	1440
7	930	1390	1540	1500	1810	1850	1490	1000	1260	695	1690	1830
8	906	1610	1530	1310	1810	1860	1540	1010	1360	689	1720	1950
9	908	1600	910	1310	1770	1860	1520	792	1360	616	1640	1930
10	977	1610	438	1430	1780	1830	1570	792	1700	691	1720	1930
11	1660	1580	279	1580	1780	1880	1600	785	1700	773	1630	1910
12	961	1620	---	1580	1600	1720	1560	804	1700	816	1790	1810
13	1010	1620	375	1630	1580	1650	1570	715	1690	865	1600	1810
14	1170	1640	630	1630	1580	1750	1550	718	1600	---	1590	1810
15	1270	1630	195	1650	1590	1020	1580	486	1660	---	1490	1510
16	1320	1610	231	1650	1720	853	1430	841	1860	---	1400	1530
17	1380	1650	410	1670	1720	997	1440	570	1870	---	1670	1520
18	1230	1710	410	1670	1580	1300	1600	572	1780	736	1670	1530
19	1370	1640	661	1550	1570	1300	1420	735	1790	937	1910	1620
20	244	1540	667	1630	1650	1350	300	880	1740	1300	1740	1650
21	223	2150	797	1540	1650	1360	334	882	1780	1390	1740	1380
22	293	2290	805	1780	1700	1380	560	1150	1770	1460	1680	---
23	613	1680	1030	1780	1700	1260	569	1380	1850	1460	1680	1390
24	671	1590	1060	1740	1700	1740	570	1390	1850	1460	1530	---
25	971	1590	1060	1740	1650	1780	749	1390	1290	1460	1390	1460
26	872	1680	1290	1650	1610	1440	758	1510	1290	1520	1590	---
27	1030	1680	1300	1650	1640	1490	965	1580	1160	1540	1760	1540
28	836	1740	1370	1650	1700	1600	562	1590	1600	1540	1770	1550
29	1000	1740	---	1680	1770	1420	561	1590	1370	1540	1820	---
30	1230	1740	1210	1710	---	1500	560	1640	1300	1620	1760	---
31	1350	---	---	---	---	1390	---	1640	---	1620	1770	---
MONTH	890	1620	1000	1550	1700	1580	1150	983	1590	1110	1680	1620

07242000 NORTH CANADIAN RIVER NEAR WETUMKA, OKLA.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.0	18.0	9.0	10.0	4.0	10.0	11.0	18.0	19.0	27.0	24.0	23.0
2	23.0	20.0	7.0	9.0	5.0	13.0	11.5	18.5	21.0	26.5	24.0	23.0
3	21.0	16.0	6.0	8.0	1.0	13.5	15.0	18.0	21.5	25.0	24.5	23.5
4	19.0	11.0	7.0	2.0	2.0	14.5	10.0	18.0	22.0	21.5	25.0	22.5
5	19.0	12.5	7.0	0.0	10.0	10.0	13.0	18.0	22.5	20.5	25.0	21.5
6	19.0	12.0	9.0	8.0	11.0	16.5	17.0	19.5	23.0	20.0	25.0	22.0
7	20.0	9.0	8.0	8.0	8.0	13.0	19.5	18.0	24.0	22.0	24.5	23.5
8	18.0	12.0	8.0	9.0	9.0	12.5	13.5	16.0	24.0	22.0	23.0	24.5
9	21.0	14.0	9.0	9.0	9.0	16.5	13.0	15.5	24.5	23.0	23.0	24.5
10	15.0	9.0	8.0	11.0	10.0	12.0	15.5	15.5	25.5	24.0	24.5	24.0
11	14.0	12.0	9.0	7.0	7.0	15.5	19.0	19.5	25.5	25.0	24.0	24.5
12	24.0	13.0	---	7.0	4.0	21.0	20.5	19.0	25.0	25.5	24.0	24.0
13	24.0	18.0	7.0	8.0	7.0	19.0	22.0	18.0	24.5	23.5	24.0	24.5
14	24.0	18.0	11.0	4.0	12.0	17.5	22.0	18.5	24.0	---	24.5	24.5
15	24.0	18.0	10.0	1.0	12.0	16.5	20.0	18.5	24.0	---	24.5	24.0
16	21.0	20.0	10.0	2.0	14.0	20.0	22.0	20.0	23.5	---	24.5	23.5
17	20.0	19.0	10.0	5.0	14.0	19.5	22.5	23.0	24.0	---	24.5	24.0
18	21.0	11.0	10.0	9.0	13.0	20.0	17.5	22.0	24.5	25.0	24.5	24.0
19	18.0	9.0	9.0	9.0	13.0	17.0	20.5	23.0	24.0	25.0	24.5	24.5
20	18.0	14.0	9.0	13.0	12.0	14.5	19.0	22.5	25.0	25.0	25.0	24.5
21	20.0	12.0	8.0	10.0	12.0	20.0	16.5	22.0	22.0	25.5	25.0	24.0
22	16.0	9.0	9.0	8.0	11.0	22.0	16.5	23.0	23.5	25.0	25.0	---
23	17.0	8.0	8.0	9.0	12.0	22.0	18.0	23.0	24.0	25.0	24.5	18.5
24	16.0	9.0	10.0	11.0	12.0	15.5	16.0	21.5	25.0	25.0	23.5	---
25	15.0	9.0	11.0	9.0	13.0	12.0	15.5	22.0	26.5	25.0	23.0	21.0
26	18.0	13.0	14.0	9.0	13.5	19.5	15.0	22.5	26.5	25.0	22.5	---
27	15.0	13.0	15.0	5.0	17.0	22.5	14.5	22.5	28.0	25.0	22.0	21.0
28	18.0	15.0	12.0	3.0	18.5	14.0	16.5	23.0	25.5	25.0	22.5	22.0
29	20.0	9.0	---	3.0	20.0	17.5	16.5	22.5	26.0	25.0	22.5	22.0
30	19.0	8.0	10.0	4.0	---	13.0	18.0	19.5	27.0	24.0	21.5	12.5
31	17.0	---	12.0	2.0	---	8.5	---	20.0	---	23.0	21.5	---
MONTH	19.5	13.0	9.5	7.0	10.5	16.0	17.0	20.0	24.0	24.0	24.0	23.0

07242350 DEEP FORK RIVER NEAR ARCADIA, OKLA.

LOCATION.--Lat 35°39'10", long 97°20'58", on south line of SW1/4 sec. 30, T.14 N., R. 1 W., Oklahoma County, at gaging station on county road bridge, 1.6 mi (2.6 km) upstream from Coffee Creek, 1.6 mi (2.6 km) southwest of Arcadia, and at mile 212.8 (342.4 km).

DRAINAGE AREA.--108 sq mi (279.7 km²).

PERIOD OF RECORD.--Chemical analyses: October 1969 to current year.
Water temperatures: October 1969 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-CHARGE (CFS)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)
OCT.								
01-14	27	180	164	0	140	240	36	13
15...	20	270	168	0	150	400	16	21
16-22	49	130	154	0	110	160	25	16
23-26	25	250	158	0	150	350	18	18
27...	100	69	106	0	67	90	20	--
28-31	26	200	186	4	160	250	55	16
NOV.								
01-10	23	200	178	0	160	230	34	14
11-20	23	190	180	0	160	210	32	22
21-30	24	190	256	0	130	220	11	11
DEC.								
01-03	30	210	232	0	150	230	38	22
04-12	48	160	250	0	110	180	25	13
13-14	28	180	244	0	130	180	40	16
15...	251	57	168	0	48	73	4.6	3.9
16-17	42	110	210	0	100	120	23	9.0
18-31	30	190	242	0	140	200	46	18
JAN.								
01-10	30	160	180	0	140	200	54	12
11-20	27	190	188	0	160	230	53	16
21-31	24	190	180	0	150	230	58	15
FEB.								
01-10	25	190	166	0	140	230	81	18
11-20	30	180	180	0	140	220	68	14
21-29	25	180	184	0	140	220	65	13
MAR.								
01-10	25	180	198	0	150	230	80	13
11-23	24	200	276	0	150	260	25	17
24...	70	90	182	0	72	120	.60	5.9
25...	31	200	196	0	110	260	210	25
26-31	24	200	180	0	160	260	48	14
APR.								
01-10	23	210	230	0	160	270	26	18
11-20	30	200	214	0	160	250	50	22
21-26	28	200	204	0	160	240	48	17
27...	74	140	190	0	140	200	6.6	22
28-30	85	170	186	0	80	260	79	17
MAY								
01...	37	120	154	0	96	150	15	11
02-05	26	200	192	0	150	260	35	21
06-11	30	190	174	0	140	240	27	16
12...	742	34	154	0	47	47	3.2	3.4
13...	83	74	152	0	71	98	13	3.7
14-27	33	190	184	0	140	240	34	20
28-30	90	87	154	0	75	120	18	6.6
31...	35	160	160	0	120	220	60	16
JUNE								
01-10	26	210	174	0	160	270	30	19
11-16	26	200	184	0	150	240	18	22
17...	65	71	150	0	48	88	3.7	4.7
18-22	25	220	194	0	150	280	15	20
23...	67	79	150	0	42	110	4.4	2.0
24-27	48	220	156	0	160	310	34	16
28...	76	66	138	0	58	93	11	7.8
29-30	30	200	144	0	140	290	33	9.3
JULY								
01...	25	240	152	0	160	320	34	15
02-04	319	15	154	0	21	17	12	2.1
05...	54	100	154	0	82	140	18	4.9
06-13	38	210	162	0	150	280	36	14
14-20	29	250	202	0	160	320	22	22
21-31	25	260	214	0	170	340	15	26
AUG.								
01-08	24	270	132	0	180	390	60	12
09-10	42	160	112	0	110	230	30	4.4
11-15	36	210	136	0	150	280	39	6.7
16-22	26	250	128	0	180	340	49	7.8
23-24	28	210	132	0	150	280	61	7.8
25...	89	59	120	0	56	73	8.9	1.7
26-31	35	200	116	0	130	270	41	8.3
SEP.								
01-09	31	240	148	0	160	320	43	16
10-20	23	260	136	0	180	350	33	21
21-30	22	270	250	0	180	320	88	20
WTD. AVG.	--	165	180	0	124	210	34	13
TIME WTD. AVG.	34	197	187	0	145	248	40	16
TOT. LOAD (TONS)	--	5790	6320	1	4340	7350	1200	469

07242350 DEEP FORK RIVER NEAR ARCADIA, OKLA.

EXTREMES, Current year.--Dissolved solids: Maximum, 1,110 mg/l Sept. 21-30; minimum, 208 mg/l July 2-4.
Hardness: Maximum, 320 mg/l Mar. 25; minimum, 140 mg/l June 17, 23, July 2-4, Aug. 25.
Specific conductance: Maximum daily, 2,220 micromhos Aug. 3; minimum daily 356 micromhos July 3.
Water temperatures: Maximum 29°C June 28; minimum, freezing point Jan. 5, 28, Feb. 3.

Period of record.--Dissolved solids: Maximum, 1,1110 mg/l Sept. 21-30, 1972; minimum, 202 mg/l Sept. 23, 1970.
Hardness: 324 mg/l Jan. 21-31, 1970; minimum, 98 mg/l Sept. 23, 1970.
Specific conductance: Maximum daily, 2,220 micromhos Aug. 3, 1972; minimum daily, 300 micromhos Sept. 23, 1970.
Water temperatures: Maximum, 29.0°C June 17, 18, 1970, June 28, 1972; minimum, freezing point on many days during winter period.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.								
01-14	788	1.07	57.4	240	110	5.1	1610	7.8
15...	1090	1.48	58.9	280	140	7.0	1970	8.0
16-22	696	.95	92.1	220	94	3.8	1060	7.5
23-26	1000	1.36	67.5	280	150	6.5	1810	7.2
27...	392	.53	106	150	63	2.5	640	8.2
28-31	912	1.24	64.0	300	140	5.0	1520	8.4
NOV.								
01-10	812	1.10	50.4	260	110	5.4	1400	7.7
11-20	772	1.05	47.9	240	92	5.3	1320	7.1
21-30	772	1.05	50.0	260	50	5.1	1390	7.5
DEC.								
01-03	820	1.12	66.4	250	60	5.8	1420	8.2
04-12	648	.88	84.0	230	25	4.6	1110	7.5
13-14	725	.99	54.8	230	30	5.2	1240	7.4
15...	324	.44	220	160	22	2.0	563	7.3
16-17	552	.75	62.6	220	48	3.2	930	7.4
18-31	763	1.04	61.8	270	71	5.0	1300	7.5
JAN.								
01-10	783	1.06	63.4	270	120	4.2	1320	7.2
11-20	852	1.16	62.1	290	140	4.9	1430	6.9
21-31	838	1.14	54.3	280	130	4.9	1410	6.8
FEB.								
01-10	820	1.12	55.3	270	130	5.0	1480	7.8
11-20	7[illegible]	1.08	64.3	270	120	4.8	1430	8.2
21-29	812	1.10	54.8	270	120	4.8	1430	8.0
MAR.								
01-10	888	1.21	59.9	270	110	4.8	1420	8.0
11-23	944	1.28	61.2	300	74	5.0	1560	7.1
24...	506	.69	95.6	200	51	2.8	812	6.9
25...	988	1.34	62.7	320	160	4.9	1580	7.5
26-31	900	1.22	58.3	280	130	5.2	1470	7.4
APR.								
01-10	932	1.27	57.9	280	91	5.5	1570	7.6
11-20	888	1.21	71.9	290	110	5.1	1490	7.3
21-26	889	1.21	67.2	280	110	5.2	1470	7.3
27...	701	.95	140	270	110	3.7	1210	7.8
28-30	760	1.03	174	260	110	4.6	1310	7.2
MAY								
01...	563	.77	56.2	200	74	3.7	960	7.4
02-05	876	1.19	61.5	270	110	5.3	1490	7.3
06-11	836	1.14	67.7	260	120	5.1	1390	7.3
12...	248	.34	497	170	44	1.1	450	7.5
13...	426	.58	95.5	190	65	2.3	736	7.5
14-27	854	1.16	76.1	272	120	5.0	1410	8.3
28-30	487	.66	118	200	74	2.7	812	7.9
31...	781	1.06	73.8	260	130	4.3	1280	7.5
JUNE								
01-10	914	1.24	64.2	270	130	5.6	1510	7.3
11-16	846	1.15	59.4	250	99	5.5	1420	7.1
17...	350	.48	61.4	140	17	2.6	632	7.3
18-22	908	1.23	61.3	260	100	5.9	1560	7.3
23...	378	.51	68.4	140	17	2.9	674	7.5
24-27	976	1.33	126	270	140	5.8	1560	6.8
28...	401	.55	82.3	170	57	2.2	659	7.0
29-30	914	1.24	74.0	250	130	5.5	1440	6.8
JULY								
01...	958	1.30	64.7	270	150	6.4	1640	7.0
02-04	208	.28	179	140	14	.6	356	6.9
05...	533	.72	77.7	200	74	3.1	912	7.1
06-13	878	1.19	89.7	270	140	5.6	1520	7.0
14-20	952	1.29	74.5	280	110	6.5	1700	7.0
21-31	1000	1.36	67.5	270	94	6.9	1770	7.2
AUG.								
01-08	1140	1.55	73.9	280	170	7.0	1890	7.8
09-10	685	.93	77.7	200	110	5.0	1200	7.7
11-15	894	1.22	86.9	260	150	5.7	1500	7.7
16-22	1040	1.41	73.0	260	160	6.7	1740	8.0
23-24	886	1.20	67.0	250	140	5.8	1500	7.0
25...	319	.43	76.6	140	42	2.2	568	7.3
26-31	836	1.14	79.0	230	140	5.7	1410	7.8
SEP.								
01-09	934	1.27	78.2	240	120	6.7	1620	6.9
10-20	1030	1.40	64.0	250	140	7.2	1760	6.7
21-30	1110	1.51	65.9	300	95	6.8	1870	7.1
WTD. AVG.	735	.00	--	241	90	4.5	1250	7.4
TIME WTD. AVG.	848	1.15	--	262	108	5.3	1440	7.4
TOT. LOAD (TONS)	25800	--	--	--	--	--	--	--

07242350 DEEP FORK RIVER NEAR ARCADIA, OKLA.--Continued

CHEMICAL ANALYSES OF ADDITIONAL SAMPLES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)	DIS-SOLVED AMMONIA ORGANIC NITRO-GEN (N) (MG/L)	PHOS-PHATE (PO4) (MG/L)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEM-ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	PHENOLS (UG/L)
OCT. 28...	36	290	.36	1.6	.48	1.3	3.3	5.4	53	--	5.0	2
NOV. 18...	26	220	.32	1.4	.52	1.7	1.8	22	42	--	11	0
DEC. 21...	27	200	.38	1.7	.29	.9	15	32	46	--	11	4
JAN. 19...	23	210	.52	2.3	.09	.3	.52	27	59	--	31	15
FEB. 24...	30	240	.14	.60	.20	.6	18	12	60	--	19	24
MAR. 29...	25	230	.09	.40	.24	.8	.93	17	54	--	16	--
APR. 19...	28	260	.29	1.3	.14	.4	13	26	65	--	11	4
MAY 18...	33	240	.25	1.1	.13	.4	5.6	15	--	64	7.8	--
JUNE 15...	29	200	.18	.80	.16	.5	8.0	7.6	--	72	16	--
JULY 20...	33	320	.36	1.6	.52	1.7	14	18	--	54	13	3
AUG. 31...	42	260	.05	.20	.03	.1	16	21	--	50	47	1
SEP. 13...	25	370	.01	3.6	.03	.1	20	23	--	47	19	2

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	ALDRIN (UG/L)	CHLOR-DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)
OCT. 28...	.00	.1	.00	.00	.00	.05	.00	.00	.00	.00
NOV. 18...	.00	.1	.00	.00	.00	.04	.00	.00	.00	.00
DEC. 21...	.00	.0	.00	.00	.00	.04	.00	.00	.00	.00
JAN. 19...	.00	.1	.01	.00	.00	.06	.00	.00	.00	.06
FEB. 24...	.00	.1	.00	.00	.00	.04	.00	.00	.00	.10
MAR. 29...	.00	.1	.00	.00	.01	.06	.00	.00	.00	.06
APR. 19...	.00	.1	.00	.00	.00	.02	.00	.00	.00	.05
MAY 18...	.00	.1	.00	.00	.00	.03	.00	.00	.00	.00
JUNE 15...	.00	.1	.00	.00	.00	.09	.00	.00	.00	.03
JULY 20...	.00	.0	.00	.00	.00	.03	.00	.00	.00	.00
AUG. 31...	.00	.3	.00	.00	.00	.06	.00	.00	.00	.00
SEP. 13...	.00	.0	.00	.00	.00	.02	.00	.00	.00	.00

FIELD ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION
OCT. 28...	1400	7.7	15.0	7.9	84
NOV. 18...	1360	7.8	12.0	8.3	82
DEC. 21...	1140	8.1	7.5	10.1	88
JAN. 19...	1400	7.9	11.0	9.5	93
FEB. 24...	1500	7.8	11.0	9.0	88
MAR. 29...	1490	8.0	9.0	10.4	96
APR. 19...	1500	7.8	21.0	7.7	93
MAY 18...	1490	7.7	22.5	7.6	93
JUNE 15...	1190	8.0	24.0	6.6	82
JULY 20...	1710	7.7	28.5	7.6	101
AUG. 31...	1340	7.5	25.0	6.3	80
SEP. 13...	1700	7.1	27.0	7.6	100

07242350 DEEP FORK RIVER NEAR ARCADIA, OKLA. Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1360	1500	1460	---	1430	1430	1540	959	1360	1640	1750	1460
2	1450	1480	1550	---	1500	1440	---	1410	1480	---	1780	1710
3	---	1460	1350	1360	1570	1450	1560	1480	1520	356	2220	---
4	1110	1440	883	1370	1460	1480	1660	1540	---	---	2010	---
5	1410	1450	---	1500	1480	---	1650	1580	1530	912	2000	1670
6	1490	1500	1170	1420	---	1430	1590	1260	1580	1310	---	1730
7	1500	---	1070	1380	1520	1480	1610	---	1560	1470	1810	1590
8	1560	1500	1270	1380	1540	1470	1640	1270	1570	1570	1930	1710
9	1710	1480	866	---	1480	1500	---	1520	1600	---	1010	1760
10	---	1440	1030	1360	1490	1600	1560	1540	1570	1630	1420	---
11	1570	1490	863	1390	1440	1600	1610	1470	---	1720	---	1790
12	1530	1450	---	1540	1460	---	1560	450	1380	---	1880	1880
13	1570	1380	1240	1510	---	1570	1570	728	1420	1590	---	1800
14	1480	---	1250	1640	1440	1580	1570	---	1500	1690	1880	1810
15	1970	1380	563	1640	1320	1590	1460	1280	1400	1740	910	1760
16	1530	1350	797	---	1460	1570	---	1440	1540	---	1510	1870
17	---	1430	1070	1440	1490	1620	1520	1430	626	1780	1770	---
18	1270	1430	1180	1420	1440	1620	1600	1460	---	1780	1860	1890
19	912	1380	---	1460	1450	---	1510	1470	1530	1690	1860	1760
20	912	1470	1290	1480	---	1620	1550	1560	1670	1730	---	1730
21	918	---	1330	1470	1460	1680	1210	---	1490	1730	1840	1650
22	927	1420	1260	1490	1430	1460	1420	1540	1590	1780	1900	1830
23	1800	1400	1360	---	1430	1710	---	1590	664	---	1360	1840
24	---	1390	1320	1440	1520	793	1630	1580	1530	1730	1760	---
25	1810	---	---	1410	1470	1580	1680	1580	---	1700	568	---
26	1820	---	---	1560	1450	---	1670	1610	1540	1780	1250	2000
27	643	1500	1210	1510	---	1570	1200	1600	1760	1800	---	1990
28	1450	---	1290	1560	1460	1600	1460	---	648	1900	1760	1970
29	1770	1450	1380	1490	1450	1590	1340	---	1380	1840	1770	1960
30	1410	1270	1320	---	---	1530	---	805	1600	---	1080	1850
31	---	---	1350	1480	---	1540	---	1300	---	1790	1440	---
MONTH	1420	1440	1180	1470	1470	1520	1530	1360	1420	---	1630	1790

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.0	17.0	7.0	---	7.0	12.0	11.0	18.0	22.0	27.0	25.0	24.0
2	23.0	14.0	7.0	---	5.0	4.0	---	16.0	25.0	---	26.0	23.0
3	---	11.0	6.0	9.0	0.0	7.0	15.0	17.0	24.0	22.0	26.0	---
4	18.0	11.0	8.0	1.0	3.0	7.0	11.0	17.0	---	---	27.0	---
5	18.0	12.0	---	0.0	5.0	---	14.0	19.0	25.0	21.0	26.0	22.0
6	18.0	11.0	9.0	2.0	---	9.0	19.0	18.0	24.0	21.0	---	23.0
7	18.0	---	8.0	6.0	2.0	13.0	19.0	---	26.0	22.0	25.0	24.0
8	---	10.0	10.0	7.0	4.0	9.0	14.0	16.0	25.0	22.0	25.0	25.0
9	16.0	9.0	8.0	---	6.0	10.0	---	18.0	25.0	---	23.0	25.0
10	---	10.0	8.0	7.0	8.0	13.0	19.0	18.0	25.0	26.0	24.0	---
11	15.0	12.0	7.0	6.0	3.0	16.0	22.0	18.0	---	25.0	---	26.0
12	17.0	13.0	---	8.0	3.0	---	23.0	17.0	25.0	---	26.0	25.0
13	17.0	14.0	6.0	6.0	---	15.0	22.0	17.0	25.0	25.0	---	25.0
14	16.0	---	12.0	7.0	8.0	13.0	22.0	---	24.0	26.0	27.0	26.0
15	18.0	17.0	10.0	1.0	7.0	15.0	23.0	19.0	25.0	26.0	26.0	24.0
16	21.0	17.0	8.0	---	8.0	13.0	---	22.0	24.0	---	26.0	25.0
17	---	17.0	8.0	4.0	9.0	13.0	18.0	22.0	24.0	26.0	26.0	---
18	20.0	13.0	8.0	9.0	8.0	15.0	20.0	23.0	---	26.0	26.0	26.0
19	18.0	8.0	---	9.0	10.0	---	20.0	23.0	25.0	26.0	27.0	26.0
20	18.0	9.0	8.0	11.0	---	---	20.0	23.0	25.0	27.0	---	25.0
21	18.0	---	7.0	7.0	10.0	15.0	17.0	---	25.0	---	27.0	21.0
22	17.0	9.0	7.0	8.0	8.0	14.0	17.0	24.0	24.0	26.0	25.0	18.0
23	18.0	8.0	9.0	---	9.0	15.0	---	24.0	20.0	---	24.0	17.0
24	---	9.0	10.0	9.0	12.0	13.0	17.0	22.0	26.0	27.0	25.0	---
25	17.0	---	---	5.0	10.0	---	16.0	24.0	---	27.0	24.0	---
26	19.0	---	---	6.0	12.0	---	18.0	24.0	27.0	27.0	23.0	24.0
27	19.0	10.0	15.0	3.0	---	15.0	15.0	24.0	28.0	27.0	---	22.0
28	16.0	---	7.0	0.0	11.0	13.0	17.0	---	29.0	25.0	24.0	24.0
29	19.0	7.0	11.0	2.0	15.0	11.0	16.0	---	27.0	25.0	23.0	22.0
30	18.0	8.0	10.0	---	---	14.0	---	20.0	27.0	---	22.0	19.0
31	---	---	8.0	4.0	---	11.0	---	19.0	---	25.0	24.0	---
MONTH	18.0	11.5	8.5	5.5	7.5	12.0	18.0	20.0	25.0	---	25.0	23.5

07243500 DEEP FORK NEAR BEGGS, OKLA.

LOCATION.--Lat 35°40'15", long 96°04'08", on line between secs.19 and 20, T.14 N., R.12 E., Okmulgee County, at gaging station at bridge on county road, 3.0 mi (4.8 km) downstream from Adams Creek, 4.0 mi (6.4 km) south of Beggs, 8.0 mi (12.9 km) from Flat Rock (Checkerboard) Creek, and at mile 85.0 (136.8 km).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	PHOSPHATE (PO4) (MG/L)
OCT.								
05...	2720	22	62	0	14	34	2.2	.32
15...	154	79	144	0	33	140	4.0	.33
25...	2140	30	64	0	18	50	1.4	.20
NOV.								
04...	237	80	146	0	30	150	2.2	.21
15...	102	140	180	0	36	250	1.2	.11
25...	136	150	174	0	41	300	.80	.06
DEC.								
05...	159	150	170	8	38	290	1.4	.16
15...	5630	13	34	0	12	25	1.4	.22
25...	1250	50	108	0	22	94	2.4	.42
JAN.								
05...	396	99	170	0	28	200	3.4	.20
15...	198	130	190	0	34	240	3.6	.22
25...	189	150	198	0	37	280	2.7	.20
FEB.								
05...	174	160	202	0	47	320	1.8	.40
16...	301	120	162	0	42	240	1.9	.44
25...	156	150	222	0	52	280	2.0	.46
MAR.								
05...	107	160	260	0	48	300	1.6	.26
15...	120	190	266	0	50	360	1.8	.29
25...	380	110	172	0	37	190	5.8	.82
APR.								
05...	136	140	258	0	45	250	3.7	.58
15...	88	170	276	0	46	320	3.3	.26
25...	426	65	108	0	25	130	2.7	.16
MAY								
05...	568	71	150	0	28	120	3.5	.35
15...	1110	50	115	0	23	86	1.5	--
25...	263	92	110	0	38	16	3.0	--
JUNE								
05...	101	120	248	0	48	220	2.5	.46
15...	58	130	244	0	54	240	3.1	.28
25...	107	230	192	0	35	460	2.6	.18
JULY								
05...	232	130	212	0	57	220	3.9	3.1
15...	244	62	164	0	38	88	4.4	.60
25...	28	100	192	0	46	162	1.7	.30
AUG.								
05...	7.7	110	224	0	51	190	1.3	.16
15...	26	120	246	0	52	210	1.4	.17
25...	15	160	232	0	55	280	1.4	.21
SEP.								
05...	9.2	140	210	0	82	230	1.5	.14
15...	13	160	230	0	75	260	1.3	.16
24...	8.6	150	220	0	65	250	.70	.07

07243500 DEEP FORK NEAR BEGGS, OKLA.

DRAINAGE AREA.--2,018 sq mi (5,226.6 km²).

PERIOD OF RECORD.--Chemical analyses: November 1951 to current year.
Water temperatures: November 1951 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.								
05...	146	.20	1070	62	11	1.2	235	7.9
15...	416	.57	173	170	52	2.6	740	7.4
25...	175	.24	1010	74	21	1.5	290	7.4
NOV.								
04...	430	.58	275	180	60	2.6	763	8.1
15...	647	.88	178	250	100	3.9	1170	7.9
25...	723	.98	265	280	140	3.9	1290	7.6
DEC.								
05...	700	.95	300	280	130	3.9	1270	8.5
15...	101	.14	1540	50	22	.8	149	6.8
25...	290	.39	979	130	41	1.9	520	8.3
JAN.								
05...	528	.72	564	240	100	2.8	962	7.6
15...	617	.84	330	270	110	3.4	1130	7.7
25...	727	.99	371	290	130	3.8	1300	7.5
FEB.								
05...	756	1.03	355	310	140	4.0	1390	7.6
16...	606	.82	492	250	120	3.3	1110	7.7
25...	712	.97	300	310	130	3.7	1300	8.3
MAR.								
05...	782	1.06	226	350	140	3.7	1380	7.9
15...	872	1.19	283	370	150	4.3	1540	7.7
25...	522	.71	536	220	79	3.2	916	7.5
APR.								
05...	686	.93	252	310	98	3.5	1220	7.7
15...	838	1.14	199	360	130	3.9	1470	7.7
25...	374	.51	430	150	61	2.3	628	7.3
MAY								
05...	404	.55	620	170	47	2.4	699	7.4
15...	295	.40	884	130	36	1.9	507	7.9
25...	468	.64	332	160	70	3.2	796	8.2
JUNE								
05...	655	.89	179	290	87	3.1	1100	7.3
15...	679	.92	106	290	90	3.3	1190	7.5
25...	1020	1.39	295	340	180	5.4	1770	7.3
JULY								
05...	678	.92	425	260	86	3.5	1120	7.6
15...	366	.50	241	160	25	2.1	611	7.6
25...	526	.72	39.8	210	52	3.0	900	7.5
AUG...								
05...	574	.78	11.9	260	76	3.0	1020	7.6
15...	638	.87	44.8	290	88	3.1	1110	7.1
25...	730	.99	29.6	300	110	4.0	1290	7.0
SEP.								
05...	696	.95	17.3	270	98	3.7	1200	6.8
15...	764	1.04	26.8	300	110	4.0	1310	7.5
24...	730	.99	17.0	280	100	3.9	1260	7.6

07243500 DEEP FORK NEAR BEGGS, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	511	788	1220	780	1510	1500	1120	833	992	1060	920	---
2	529	694	1230	780	1520	1380	1150	596	976	969	934	1380
3	223	751	1310	804	1440	1400	1170	648	1060	814	954	1320
4	204	761	---	884	1410	1400	1210	611	1080	961	989	1210
5	235	---	1270	961	1390	1410	1220	690	1100	1120	1020	1200
6	350	862	1190	980	1510	1440	1240	734	1120	1030	1020	1210
7	394	912	1080	1010	1430	1400	1300	766	1120	416	1040	1240
8	372	945	1100	1030	1320	1440	1320	761	1160	217	1060	1210
9	441	969	662	1060	1400	1500	1330	710	1140	---	1070	1280
10	---	1020	208	1110	1510	1510	1350	750	1110	471	1060	1300
11	575	1100	187	1100	1490	1480	1410	574	1110	540	997	1300
12	607	1060	206	1100	1440	1520	1460	584	1080	561	1060	1300
13	665	1090	241	1000	1420	1570	1500	557	1160	563	1070	1270
14	---	1120	301	1120	1310	1570	1490	474	1180	587	1070	1330
15	738	1160	145	1140	---	1570	1480	507	1190	611	1110	1310
16	739	1180	127	1190	1100	1630	---	394	1260	654	1160	1580
17	812	1160	137	1310	1080	1520	1580	400	1350	650	1180	1320
18	772	1780	171	1410	1100	1380	1600	496	1320	657	1120	1260
19	590	1210	220	1370	1160	750	1600	600	1340	667	---	1320
20	136	1190	269	1350	1210	870	1910	613	1330	677	1700	1170
21	137	1020	313	1360	1200	1470	762	647	1360	699	1730	1400
22	140	1050	349	---	1260	789	465	673	1400	792	1590	1400
23	213	1160	392	1310	1290	918	473	697	1400	860	1540	1400
24	233	1240	464	1290	1290	838	611	757	1270	909	1380	1260
25	282	1280	513	1300	1300	933	628	796	1760	900	1290	---
26	334	1230	570	1330	1310	959	598	827	1500	871	1190	1380
27	426	1150	624	1360	1300	991	727	873	1190	856	1170	1400
28	514	1130	674	1380	1370	967	577	877	1160	856	1440	1420
29	537	1160	742	1360	1390	989	570	973	1000	872	1440	---
30	598	1190	950	1380	---	1040	---	893	1120	892	1740	---
31	618	---	764	1500	---	1080	---	965	---	910	1780	---
MONTH	446	1080	588	1170	1340	1260	1140	686	1210	755	1230	1310

07243500 DEEP FORK NEAR BEGGS, OKLA.--Continued

TEMPERATURE (°C) OF WATER, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27.0	18.0	11.0	9.0	5.0	12.0	15.0	22.0	27.0	33.0	32.0	---
2	23.0	17.0	7.0	9.0	3.0	11.0	17.0	22.0	26.0	27.0	33.0	23.0
3	22.0	16.0	9.0	10.0	5.0	12.0	17.0	21.0	28.0	27.0	32.0	24.0
4	22.0	17.0	---	6.0	5.0	10.0	16.0	19.0	29.0	26.0	31.0	24.0
5	21.0	---	8.0	5.0	5.0	12.0	21.0	21.0	28.0	28.0	33.0	27.0
6	21.0	9.0	7.0	7.0	4.0	13.0	21.0	20.0	29.0	26.0	30.0	28.0
7	23.0	4.0	8.0	7.0	5.0	13.0	21.0	18.0	31.0	25.0	30.0	26.0
8	19.0	4.0	10.0	8.0	7.0	13.0	18.0	18.0	29.0	26.0	32.0	25.0
9	18.0	3.0	10.0	7.0	7.0	14.0	18.0	18.0	29.0	---	30.0	27.0
10	18.0	4.0	9.0	9.0	7.0	16.0	20.0	19.0	29.0	27.0	32.0	30.0
11	19.0	5.0	11.0	9.0	6.0	17.0	23.0	19.0	29.0	28.0	33.0	29.0
12	22.0	12.0	10.0	9.0	6.0	18.0	27.0	21.0	27.0	27.0	27.0	29.0
13	19.0	10.0	8.0	7.0	7.0	17.0	27.0	20.0	29.0	31.0	27.0	29.0
14	---	13.0	10.0	5.0	10.0	19.0	26.0	20.0	29.0	32.0	30.0	30.0
15	21.0	15.0	12.0	6.0	---	18.0	22.0	23.0	27.0	31.0	32.0	30.0
16	20.0	17.0	11.0	8.0	10.0	17.0	23.0	23.0	29.0	32.0	32.0	30.0
17	21.0	16.0	12.0	9.0	11.0	19.0	23.0	24.0	29.0	31.0	31.0	30.0
18	21.0	13.0	8.0	9.0	8.0	17.0	25.0	25.0	30.0	30.0	32.0	30.0
19	20.0	13.0	12.0	12.0	10.0	18.0	23.0	26.0	30.0	32.0	---	28.0
20	17.0	14.0	10.0	9.0	12.0	17.0	21.0	27.0	31.0	32.0	33.0	29.0
21	19.0	12.0	8.0	7.0	13.0	18.0	19.0	27.0	30.0	31.0	33.0	29.0
22	17.0	12.0	8.0	---	12.0	20.0	21.0	28.0	32.0	32.0	29.0	30.0
23	17.0	10.0	10.0	8.0	12.0	18.0	19.0	27.0	27.0	32.0	29.0	30.0
24	19.0	11.0	10.0	8.0	14.0	18.0	19.0	28.0	29.0	32.0	32.0	30.0
25	18.0	10.0	13.0	10.0	15.0	17.0	17.0	28.0	30.0	33.0	28.0	---
26	20.0	12.0	13.0	8.0	11.0	17.0	18.0	28.0	32.0	34.0	29.0	30.0
27	19.0	14.0	12.0	4.0	13.0	18.0	17.0	28.0	32.0	35.0	28.0	28.0
28	20.0	11.0	11.0	4.0	16.0	15.0	18.0	27.0	32.0	31.0	28.0	27.0
29	20.0	9.0	13.0	5.0	17.0	15.0	18.0	24.0	32.0	31.0	25.0	28.0
30	17.0	8.0	12.0	5.0	---	14.0	---	24.0	33.0	31.0	25.0	22.0
31	18.0	---	12.0	5.0	---	15.0	---	24.0	---	30.0	26.0	---
MONTH	20.0	11.5	10.0	7.5	9.0	15.5	20.5	23.0	29.5	29.0	30.0	28.0

07245000 CANADIAN RIVER NEAR WHITEFIELD, OKLA.
(Irrigation network station)

LOCATION.--Lat 35°15'45", long 95°14'19", in SE1/4SE1/4 sec.12, T.9 N., R.19 E., Haskell County, at gaging station at bridge on State Highway 2, 0.8 mi (1.3 km) north of Whitefield, 5.5 mi (8.8 km) upstream from Taleka (Snake) Creek, 8.2 mi (13.2 km) downstream from Eufaula Dam, and at mile 18.8 (30.2 km).

DRAINAGE AREA.--47,576 sq mi (123,221.8 km²), of which 9,700 sq mi (25,123 km²) is probably noncontributing.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTAN-TANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)
OCT.								
05...	155	34	132	0	20	52	1.2	.11
15...	848	55	112	0	26	98	.20	.09
25...	91	46	132	6	22	75	.60	.08
NOV.								
05...	4440	56	76	6	24	98	.10	.02
15...	3820	56	112	0	24	97	.70	.03
25...	1040	52	108	0	24	85	1.0	.06
DEC.								
05...	628	52	104	0	21	92	1.0	.19
15...	23400	24	72	0	16	36	.40	3.0
25...	13600	46	96	0	22	79	1.2	.01
JAN.								
05...	668	43	92	0	22	72	1.2	.08
15...	675	43	92	0	21	71	1.6	.14
25...	9320	42	88	0	23	70	1.7	.14
FEB.								
05...	780	40	84	0	23	66	1.3	.13
15...	95	39	82	0	22	65	1.4	.17
25...	54	39	92	0	22	64	1.3	.16
MAR.								
05...	120	40	128	0	24	62	.40	.05
15...	188	40	90	0	22	63	1.7	.11
25...	272	39	84	0	22	63	1.7	.14
APR.								
05...	82	39	98	0	23	64	1.5	.10
15...	102	32	78	0	21	54	1.6	.08
25...	135	38	54	10	24	62	.10	.00
MAY								
05...	22	38	152	0	22	60	.50	.01
15...	3520	38	80	0	22	65	1.8	.10
25...	860	38	82	0	23	66	1.4	.10
JUNE								
05...	290	39	92	0	28	70	1.6	.07
15...	550	37	56	20	26	66	.10	.00
25...	330	41	92	0	29	74	1.2	.04
JULY								
05...	74	44	160	0	26	63	.10	.07
15...	226	43	94	0	28	75	.90	.05
25...	330	44	98	0	31	76	1.1	.07
AUG.								
05...	253	47	98	0	26	79	.20	.00
15...	495	48	100	0	28	80	.90	.07
25...	290	48	102	0	27	81	.60	.06
SEP.								
05...	102	48	154	0	16	75	.20	.01
15...	167	37	96	0	23	61	1.5	.18
25...	94	40	140	0	26	64	.90	.12

CHEMICAL ANALYSES OF ADDITIONAL SAMPLES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTAN-TANEOUS DIS-CHARGE (CFS)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)
OCT.			
06...	155	14	.6
NOV.			
03...	5260	10	1.4
DEC.			
08...	3620	9	.8
JAN.			
04...	1110	10	.2
FEB.			
01...	14200	15	1.0
MAR.			
29...	8800	11	1.4
APR.			
11...	759	11	.9
MAY			
02...	120	21	.3
JUNE			
13...	380	10	.4
JULY			
05...	135	18	.4
AUG.			
15...	538	31	6.6
SEP.			
28...	118	11	.9

07245000 CANADIAN RIVER NEAR WHITEFIELD, OKLA.
(Irrigation network station)

PERIOD OF RECORD.--Chemical analyses: September 1944 to February 1945, September 1946 to September 1964, October 1966 to current year.

Water temperatures: September 1944 to February 1945, September 1946 to September 1964, October 1966 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.								
05...	230	.31	96.3	120	12	1.4	408	8.0
15...	303	.41	694	130	38	2.1	534	8.3
25...	278	.38	68.3	140	22	1.7	490	8.5
NOV.								
05...	272	.37	3260	100	28	2.4	484	8.7
15...	288	.39	2970	130	38	2.1	521	8.2
25...	269	.37	755	110	21	2.2	476	8.0
DEC.								
05...	288	.39	488	130	45	2.0	509	8.2
15...	141	.19	8910	74	15	1.2	257	7.7
25...	254	.35	9330	110	31	1.9	460	7.3
JAN.								
05...	240	.33	433	110	35	1.8	431	7.9
15...	241	.33	439	100	25	1.9	424	7.6
25...	235	.32	5910	110	38	1.7	420	7.7
FEB.								
05...	234	.32	493	96	27	1.8	400	7.9
15...	230	.31	59.0	94	27	1.8	391	8.0
25...	232	.32	33.8	100	25	1.7	401	8.0
MAR.								
05...	248	.34	80.4	130	25	1.5	427	8.3
15...	229	.31	116	100	26	1.7	388	7.9
25...	240	.33	176	96	27	1.7	395	7.8
APR.								
05...	244	.33	54.0	120	40	1.5	406	8.0
15...	197	.27	54.2	90	26	1.5	342	8.0
25...	215	.29	78.4	84	23	1.8	363	8.7
MAY								
05...	274	.37	16.3	140	15	1.4	465	8.2
15...	231	.31	2200	94	28	1.7	387	7.6
25...	233	.32	541	96	29	1.7	391	7.6
JUNE								
05...	232	.32	182	120	45	1.5	410	7.2
15...	213	.29	316	110	31	1.5	378	9.2
25...	236	.32	210	120	45	1.6	421	6.8
JULY								
05...	268	.36	53.5	150	19	1.6	478	8.0
15...	247	.34	151	120	43	1.7	438	6.6
25...	253	.34	225	120	40	1.7	447	7.0
AUG.								
05...	252	.34	172	120	40	1.9	451	7.1
15...	253	.34	338	110	28	2.0	457	7.9
25...	262	.36	205	120	36	1.9	467	7.1
SEP.								
05...	296	.40	81.5	150	24	1.7	517	7.7
15...	218	.30	98.3	100	21	1.6	384	6.2
25...	265	.36	67.2	140	25	1.5	470	6.6

FIELD ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION
OCT.				
06...	550	22.0	7.6	90
NOV.				
03...	500	21.0	7.9	92
DEC.				
08...	490	11.0	9.8	91
JAN.				
04...	440	7.0	11.6	100
FEB.				
01...	420	6.0	11.8	100
09...	385	6.0	11.8	98
16...	420	7.0	8.8	77
MAR.				
29...	330	12.0	10.4	102
APR.				
11...	420	17.5	9.0	99
MAY				
02...	280	16.5	8.0	86
JUNE				
13...	430	21.0	8.2	96
JULY				
05...	225	21.0	8.2	94
AUG.				
15...	500	22.5	6.3	75
SEP.				
28...	465	24.0	8.1	100

07245000 CANADIAN RIVER NEAR WHITEFIELD, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	526	535	534	381	484	413	433	450	405	480	483	493
2	517	523	479	426	403	421	460	470	401	485	511	518
3	209	526	484	426	428	381	489	460	439	448	495	524
4	320	517	369	402	423	412	387	441	404	437	488	518
5	433	484	253	383	411	441	402	461	398	549	484	510
6	505	528	502	389	408	510	416	398	378	460	548	511
7	498	528	506	357	401	320	414	470	397	503	511	489
8	527	528	343	400	390	420	383	460	400	495	528	477
9	532	529	194	439	392	419	429	421	402	474	480	475
10	554	512	79	394	411	---	473	410	401	436	483	480
11	526	514	153	367	394	419	383	430	447	466	498	502
12	534	518	134	394	395	453	382	386	469	426	503	482
13	534	521	506	366	419	468	380	380	405	445	511	482
14	529	524	504	540	478	399	386	425	410	428	452	485
15	532	521	503	423	395	453	342	384	383	411	460	384
16	538	521	501	430	371	390	461	386	450	457	473	461
17	546	518	502	421	391	407	463	349	418	520	465	478
18	528	308	484	365	398	383	424	363	452	440	473	450
19	528	296	485	400	398	447	457	383	464	456	452	472
20	300	492	447	416	396	418	398	354	418	435	464	450
21	252	509	477	418	394	370	348	417	417	429	458	486
22	460	522	470	403	395	402	359	364	418	451	464	---
23	482	520	379	448	394	360	413	379	414	610	474	---
24	449	459	431	422	393	365	440	360	431	518	499	402
25	465	467	458	481	403	388	363	357	422	464	493	470
26	535	625	454	378	395	440	563	360	407	453	491	493
27	515	482	448	412	452	472	417	381	351	427	502	436
28	553	499	355	410	492	403	430	520	414	468	511	478
29	534	520	448	434	394	390	436	410	461	498	560	500
30	530	518	445	410	---	401	449	401	460	508	487	---
31	532	---	450	530	---	397	---	404	---	607	501	---
MONTH	485	502	412	415	410	413	419	408	418	474	490	479

TEMPERATURE (°C) OF WATER, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.0	20.5	---	9.5	5.5	---	---	---	19.0	---	---	26.0
2	24.0	20.5	---	9.5	6.0	5.0	---	---	19.5	---	---	26.0
3	22.0	19.5	---	9.0	4.0	6.0	---	---	21.5	---	---	25.0
4	22.5	---	---	7.5	3.5	7.0	---	---	22.0	---	---	25.0
5	22.5	---	---	7.5	4.5	---	---	---	20.0	---	---	26.0
6	22.5	---	---	7.5	7.5	---	---	---	20.0	25.5	---	25.5
7	22.0	---	---	7.5	5.0	---	---	---	19.0	26.0	---	25.5
8	22.0	---	---	7.5	5.0	7.5	---	---	19.0	27.0	---	26.0
9	21.5	---	---	10.0	5.5	---	---	7.0	---	27.0	---	26.0
10	19.0	---	---	9.0	4.5	---	---	---	---	24.5	22.0	---
11	22.0	---	---	7.5	4.0	---	16.0	---	---	24.5	23.0	---
12	23.0	---	---	7.0	---	---	18.0	---	---	24.5	23.0	---
13	23.0	---	---	7.5	4.0	10.5	18.0	---	---	26.0	22.0	---
14	22.5	---	---	---	6.0	---	16.5	---	---	25.0	23.5	---
15	22.5	---	---	---	---	---	---	---	---	26.0	24.0	---
16	21.5	---	10.5	---	5.5	---	---	---	---	28.5	24.5	---
17	22.0	---	10.5	6.5	---	---	---	19.5	---	---	25.0	---
18	22.5	---	10.0	7.5	---	---	---	18.5	---	---	25.0	23.0
19	22.0	---	10.0	7.0	---	---	---	20.0	---	26.5	25.5	25.0
20	21.5	---	10.0	7.5	---	---	16.0	20.0	23.0	25.0	25.5	25.5
21	20.5	---	10.0	7.0	---	13.0	---	20.0	21.0	23.0	25.0	22.5
22	21.5	---	9.5	7.0	7.0	11.0	---	19.0	21.5	25.0	24.5	17.0
23	21.0	---	9.5	7.0	7.0	13.0	14.0	19.5	20.5	---	25.0	18.0
24	21.0	---	9.5	8.5	9.5	---	---	19.5	22.0	---	25.5	---
25	20.5	---	10.0	7.0	8.0	---	---	20.5	23.5	25.5	25.5	---
26	21.5	---	10.0	6.5	7.0	---	---	18.0	23.0	25.5	26.5	---
27	21.0	---	10.0	6.0	7.0	---	---	18.0	23.5	25.5	26.5	25.5
28	21.5	---	9.5	4.0	---	---	---	21.0	25.5	25.5	25.5	24.5
29	22.0	---	9.5	5.0	---	---	---	20.5	25.0	27.0	24.0	20.5
30	21.0	---	9.5	5.0	---	---	---	20.0	---	28.0	24.0	18.0
31	19.5	---	9.5	5.5	---	---	---	19.5	---	29.5	24.0	---
MONTH	22.0	---	---	7.5	---	---	---	---	---	---	---	---

07245000 CANADIAN RIVER NEAR WHITEFIELD, OKLA.--Continued

DISSOLVED SULFATE (SO_4), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972 (CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	19	20	22	24	25	26	27	24	25	24	24
2	21	21	25	26	24	25	27	26	24	24	22	21
3	9.2	20	24	26	26	22	24	27	27	27	23	21
4	18	21	21	24	25	24	23	27	24	26	24	21
5	26	24	13	22	24	27	24	27	23	18	24	22
6	22	20	23	23	24	22	25	23	22	27	18	22
7	23	20	22	20	24	18	25	26	23	23	22	24
8	20	20	19	24	23	25	22	27	24	23	20	25
9	20	20	8.1	27	23	25	26	25	24	25	25	25
10	18	22	---	23	24	---	25	24	24	26	24	25
11	20	21	5.0	21	23	25	22	26	27	26	23	23
12	20	21	3.6	23	23	27	22	23	26	26	23	25
13	20	21	22	21	25	26	22	22	24	27	22	25
14	20	21	22	19	25	24	23	25	24	26	28	24
15	20	21	23	25	23	27	19	22	22	24	27	22
16	19	21	23	26	21	23	27	23	27	27	25	25
17	18	21	23	25	23	24	26	20	25	21	26	25
18	20	17	24	21	23	22	25	22	28	27	25	27
19	20	16	24	24	23	27	27	22	26	27	28	26
20	16	24	27	25	23	25	23	20	25	26	26	27
21	12	22	25	25	23	21	20	25	25	26	27	24
22	27	21	26	24	23	24	20	21	25	27	26	---
23	25	21	22	27	23	21	25	22	25	---	25	---
24	27	27	26	25	23	22	27	21	26	21	23	24
25	26	26	27	25	24	23	21	20	25	26	24	26
26	19	---	27	22	23	27	---	21	24	27	24	24
27	21	25	27	24	28	26	25	22	20	26	23	26
28	18	23	20	24	24	24	26	21	25	26	22	25
29	20	21	27	26	23	23	26	24	27	23	17	23
30	20	21	27	24	---	24	27	24	27	22	24	---
31	20	---	27	20	---	23	---	24	---	---	23	---
MONTH	20	21	22	24	24	24	24	23	25	25	24	24

DISSOLVED SULFATE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972 (CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	363	246	308	142	922	135	11	95	314	6.1	101	8.4
2	49	378	309	38	913	255	6.1	54	280	7.1	96	6.3
3	39	359	361	272	630	323	58	10	108	6.7	167	5.6
4	10	383	115	498	593	68	159	5.8	44	5.6	97	5.6
5	26	616	126	542	158	8.6	67	92	259	3.5	21	5.5
6	9.4	340	488	444	112	113	67	20	263	5.0	5.8	35
7	73	255	357	270	573	34	127	6.3	252	4.0	107	179
8	91	460	176	140	529	47	49	26	253	4.1	149	177
9	24	437	59	21	434	7.6	6.1	60	239	43	44	75
10	4.7	291	---	231	322	---	122	7.7	60	136	8.3	22
11	240	135	20	224	325	8.2	194	183	10	127	6.6	50
12	404	77	51	216	58	6.1	275	358	311	28	6.0	95
13	407	142	775	231	9.7	331	230	72	215	23	6.2	220
14	300	229	1040	362	256	153	221	94	237	74	248	49
15	257	326	1390	411	210	269	41	495	22	22	287	187
16	54	386	1330	449	173	99	9.5	306	216	6.1	231	101
17	13	315	1300	700	111	45	78	397	66	138	262	111
18	242	159	1400	413	124	29	8.8	448	9.1	95	316	349
19	340	133	1380	508	147	43	119	460	257	34	158	339
20	142	79	1740	592	125	9.7	259	156	253	221	242	267
21	14	66	1890	475	345	96	32	120	238	388	363	46
22	60	479	1910	238	380	16	11	356	102	76	151	---
23	28	490	1300	419	342	131	8.6	450	137	---	140	---
24	26	315	973	804	272	117	37	413	148	117	67	5.8
25	364	340	988	806	327	27	9.5	436	157	177	21	5.6
26	367	---	988	793	43	6.8	---	469	261	189	6.9	8.0
27	375	75	969	807	9.6	207	8.6	242	121	196	4.8	20
28	328	159	709	887	344	197	7.3	73	50	32	50	11
29	323	368	800	491	461	187	5.7	36	20	9.0	14	8.4
30	89	393	772	348	---	121	5.3	223	7.6	7.3	156	---
31	10	---	379	640	---	129	---	271	---	---	36	---
MONTH	164	291	813	434	319	107	77	208	164	75	115	89

07245000 CANADIAN RIVER NEAR WHITEFIELD, OKLA.--Continued

DISSOLVED CHLORIDE (CL), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	93	93	61	82	68	72	75	66	82	82	84
2	89	90	81	71	66	70	78	80	65	83	88	89
3	27	91	82	71	71	61	83	78	73	75	85	91
4	49	89	59	66	70	68	63	74	66	73	83	89
5	72	82	35	62	68	74	66	78	65	96	82	88
6	87	91	86	63	67	88	69	65	61	78	96	88
7	85	91	87	56	65	49	68	80	65	86	88	83
8	91	91	54	65	63	69	62	78	65	85	91	81
9	92	92	24	73	64	69	71	70	66	80	82	81
10	97	88	---	64	68	---	80	67	65	73	82	82
11	91	89	17	58	64	69	62	71	75	79	85	86
12	93	89	13	64	64	76	62	62	79	71	86	82
13	93	90	87	58	69	79	61	61	66	74	88	82
14	92	91	87	94	81	65	62	70	67	71	76	83
15	92	90	86	70	64	76	53	62	62	68	78	82
16	93	90	86	71	59	63	76	62	75	77	80	82
17	95	89	86	70	63	67	78	55	69	90	79	81
18	91	46	82	58	65	62	70	62	76	73	80	75
19	91	44	83	65	65	75	77	62	78	77	76	80
20	85	84	75	69	64	69	65	56	69	72	78	75
21	35	88	81	69	64	59	55	69	69	71	77	83
22	78	90	80	66	64	66	57	58	69	76	78	---
23	82	90	61	75	64	57	68	61	68	---	80	---
24	75	77	72	70	64	62	73	57	72	89	86	66
25	79	79	77	82	66	63	58	56	70	78	84	80
26	93	---	76	61	64	73	---	57	67	76	84	84
27	89	82	75	68	76	80	69	61	55	71	86	73
28	97	86	56	67	84	66	71	90	68	79	88	81
29	93	90	75	72	64	63	73	67	78	85	98	86
30	92	89	74	67	---	65	75	65	78	87	83	---
31	92	---	75	92	---	65	---	66	---	---	86	---
MONTH	83	85	70	68	67	68	68	67	69	78	84	81

DISSOLVED CHLORIDE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1630	1180	1460	504	3120	372	29	263	870	20	340	30
2	208	1660	1010	106	2530	704	18	167	776	24	390	27
3	112	1610	1220	753	1740	895	203	30	299	18	608	25
4	29	1610	320	1380	1640	188	441	16	123	16	337	24
5	72	2080	354	1500	437	24	186	269	716	19	72	22
6	36	1550	1860	1230	311	455	185	55	730	14	31	140
7	269	1160	1400	750	1590	95	351	19	698	15	432	624
8	411	2090	488	388	1460	130	135	76	699	15	679	571
9	113	2000	175	58	1200	21	17	165	661	136	144	239
10	26	1190	---	640	889	---	383	21	166	374	28	74
11	1070	557	67	621	899	23	537	505	28	383	24	189
12	1920	326	189	598	161	17	761	992	954	77	23	317
13	1930	615	3030	641	27	1010	637	198	596	62	25	733
14	1370	1010	4000	1800	831	423	613	258	656	203	684	165
15	1200	1410	5310	1140	581	746	115	1370	61	60	833	519
16	265	1670	5010	1240	480	275	28	847	597	17	728	334
17	67	1340	4930	1930	306	125	232	1100	181	592	785	362
18	1100	444	4720	1150	343	79	24	1240	25	262	996	964
19	1550	372	4710	1400	408	118	339	1270	764	95	436	1060
20	395	282	4810	1640	346	27	718	433	698	610	721	736
21	38	262	6100	1310	956	267	88	332	659	1070	1040	157
22	173	2090	5910	658	1050	44	31	986	281	210	448	---
23	94	2100	3590	1160	946	364	24	1250	379	---	445	---
24	72	908	2690	2220	753	324	103	1150	408	495	252	16
25	1090	1030	2830	2670	903	75	26	1210	433	527	75	17
26	1760	---	2760	2200	119	19	---	1300	722	524	24	29
27	1560	250	2680	2230	26	648	24	671	335	541	18	54
28	1790	593	1970	2450	1230	546	20	313	138	97	202	37
29	1530	1580	2210	1360	1280	519	16	100	59	33	83	32
30	412	1670	2130	963	---	336	15	617	22	29	538	---
31	49	---	1050	2950	---	358	---	749	---	---	134	---
MONTH	721	1190	2630	1280	915	308	217	580	450	226	373	278

07245000 CANADIAN RIVER NEAR WHITEFIELD, OKLA.--Continued

DISSOLVED SOLIDS, IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	297	302	302	218	274	235	246	256	231	272	274	279
2	292	296	271	242	230	240	261	267	229	275	289	293
3	123	297	274	242	243	218	277	261	249	254	280	296
4	184	292	211	229	241	235	221	251	230	248	276	293
5	246	274	147	219	234	251	229	262	227	310	274	289
6	286	298	284	222	232	289	237	227	216	261	309	289
7	282	298	286	204	229	164	236	267	226	285	289	277
8	298	248	197	228	223	239	219	261	228	280	298	270
9	301	299	115	249	224	238	244	240	229	269	272	269
10	313	290	---	225	234	---	268	234	229	248	274	272
11	297	291	92	210	225	238	219	245	254	264	282	284
12	302	293	82	225	225	257	218	220	266	242	285	273
13	302	295	286	209	238	265	217	217	231	253	289	273
14	299	296	285	305	271	227	220	242	234	243	257	275
15	301	295	285	241	225	257	196	219	219	234	261	219
16	304	295	284	245	212	223	262	220	256	259	268	273
17	308	293	284	240	223	232	263	200	238	294	264	271
18	298	177	274	209	227	219	241	219	257	250	268	256
19	298	171	275	228	227	254	259	219	263	259	257	268
20	173	279	254	237	226	238	227	203	238	267	263	256
21	147	288	270	238	225	212	199	237	237	244	260	275
22	261	295	267	230	225	229	205	208	238	256	263	---
23	273	294	216	254	225	206	235	216	236	---	269	---
24	255	260	245	240	224	220	250	206	245	293	282	229
25	264	265	260	273	230	221	208	204	240	263	279	267
26	302	---	258	216	225	250	---	206	232	257	278	279
27	291	273	254	235	257	268	237	218	201	243	284	248
28	312	282	203	234	279	230	245	294	236	265	289	271
29	302	294	254	247	225	223	248	234	262	282	316	263
30	300	293	253	234	---	229	255	229	261	287	276	---
31	301	---	256	300	---	226	---	230	---	---	284	---
MONTH	275	282	241	236	234	235	236	233	238	263	278	271

DISSOLVED SOLIDS (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5310	3830	4760	1790	10360	1290	100	890	3030	67	1130	99
2	683	5420	3370	364	8800	2430	59	558	2710	80	1280	87
3	515	5250	4060	2580	5970	3170	674	101	1020	63	2010	82
4	107	5290	1140	4810	5640	652	1560	54	428	53	1120	78
5	285	6920	1480	5310	1520	81	649	904	2510	60	239	73
6	120	5050	6130	4330	1080	1500	639	194	2590	49	99	461
7	891	3790	4600	2710	5540	356	1220	65	2440	51	1420	2070
8	1340	6830	1790	1350	5150	449	478	256	2440	49	2220	1910
9	368	6520	833	197	4230	72	57	569	2310	454	479	800
10	83	3890	---	2240	3080	---	1280	74	579	1280	93	246
11	3510	1830	371	2230	3150	78	1900	1730	94	1280	81	624
12	6250	1070	1170	2100	565	57	2700	3500	3200	264	75	1050
13	6290	2010	9970	2300	93	3390	2260	703	2070	212	82	2440
14	4480	3310	13170	5830	2770	1480	2170	888	2280	697	2310	549
15	3910	4610	17520	3910	2040	2520	423	4850	215	207	2800	1830
16	862	5460	16540	4250	1720	967	93	2990	2020	59	2430	1110
17	216	4380	16260	6660	1080	434	780	4020	626	1940	2630	1210
18	3590	1700	15700	4120	1200	280	84	4390	85	891	3330	3260
19	5040	1440	15650	4910	1430	401	1140	4500	2570	320	1480	3550
20	1530	933	16310	5660	1210	92	2510	1570	2410	2080	2420	2490
21	161	863	20370	4530	3350	954	322	1150	2280	3580	3510	522
22	581	6830	19790	2290	3690	154	113	3550	970	712	1510	---
23	313	6890	12740	3920	3320	1310	83	4430	1310	---	1490	---
24	244	3060	9200	7650	2640	1150	351	4140	1400	1620	831	56
25	3660	3460	9540	8900	3150	265	95	4380	1490	1770	249	58
26	5710	---	9320	7810	418	63	---	4700	2510	1770	81	95
27	5110	833	9070	7730	89	2170	82	2380	1220	1860	60	185
28	5800	1960	7130	8510	4060	1900	69	1020	479	325	663	124
29	4990	5180	7490	4640	4480	1830	54	347	198	110	266	105
30	1340	5460	7230	3340	---	1170	50	2150	75	95	1790	---
31	160	---	3540	9620	---	1250	---	2610	---	---	443	---
MONTH	2370	3930	8870	4410	3170	1060	758	2050	1580	762	1250	932

07246400 ROBERT S. KERR LOCK AND DAM NEAR SALLISAW, OKLA.

LOCATION.--Lat 35°21'57", long. 94°46'43", in SE1/4SW1/4 sec. 8, T.10 N., R.24 E., Sequoyah County, from lock wall at dam, 0.4 mi (1.0 km) upstream from gage on bridge on U.S. Highway 59, 3.5 mi (5.6 km) downstream from Sans Bois Creek, 7.5 mi (12.1 km) south of Sallisaw, and at mile 395.4 (636.2 km).

DRAINAGE AREA.--147,750 sq mi (382,672.5 km²), of which 22,241 sq mi (57,604.2 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1969 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)
OCT. 06...	77	96	0	38	120	.47	2.1	367	.50
NOV. 09...	35	112	0	29	56	.18	.80	240	.33
DEC. 07...	91	112	0	40	140	.32	1.4	408	.55
JAN. 05...	56	112	0	41	88	.27	1.2	304	.41
FEB. 08...	80	108	0	41	120	.14	.60	374	.51
MAR. 01...	97	110	0	43	150	.34	1.5	415	.56
APR. 11...	110	130	0	49	170	.14	.60	506	.69
MAY 16...	58	118	0	43	86	.20	.90	318	.43
JUNE 20...	71	110	0	41	110	.07	.30	366	.50
JULY 27...	150	128	0	69	230	.07	.30	594	.81
AUG. 08...	120	112	0	59	190	.16	.70	523	.71
SEP. 06...	120	132	0	50	180	.07	.30	524	.71

DATE	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)
OCT. 06...	120	41	3.1	618	7.6	24.0	13	.6
NOV. 09...	120	28	1.4	422	7.7	14.0	14	.6
DEC. 07...	140	48	3.3	714	7.8	7.0	10	.9
JAN. 05...	120	28	2.2	537	7.9	5.5	9	.4
FEB. 08...	130	41	3.1	688	7.7	4.0	8	.9
MAR. 01...	140	50	3.6	750	7.9	9.0	9	.8
APR. 11...	160	53	3.8	839	7.9	14.0	12	2.4
MAY 16...	140	43	2.1	542	7.6	19.0	15	1.8
JUNE 20...	130	40	2.7	617	8.2	28.0	12	1.8
JULY 27...	170	65	5.0	1020	7.2	30.0	16	4.5
AUG. 08...	160	68	4.1	896	7.8	27.0	15	2.0
SEP. 06...	160	52	4.1	904	7.7	26.0	12	1.6

07246400 ROBERT S. KERR LOCK AND DAM NEAR SALLISAW, OKLA.--Continued

FIELD ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION
OCT.					
06...	600	8.2	24.0	7.5	91
NOV.					
09...	400	7.9	14.0	9.1	92
09...	400	--	13.5	9.5	95
09...	400	--	13.0	9.7	96
DEC.					
07...	700	8.0	7.0	10.6	91
07...	700	--	7.0	10.5	90
07...	700	--	7.0	10.4	90
JAN.					
05...	660	--	6.0	12.7	107
05...	650	8.2	5.5	12.9	107
05...	650	--	6.0	13.3	111
FEB.					
08...	680	8.2	4.0	9.7	77
08...	--	--	3.0	9.9	76
08...	--	--	3.0	9.8	74
MAR.					
01...	700	8.1	9.0	11.4	104
01...	--	--	8.5	11.6	105
01...	--	--	8.5	11.2	102
APR.					
11...	450	8.0	14.0	10.2	104
11...	450	--	13.5	10.2	103
11...	450	--	13.0	10.0	100
MAY					
16...	550	8.0	19.0	9.2	103
16...	560	--	18.0	8.8	98
16...	550	--	17.0	6.8	72
JUNE					
20...	585	8.3	28.0	8.8	115
20...	580	--	25.0	7.3	89
20...	590	--	25.0	6.4	81
JULY					
27...	1000	8.7	32.0	7.2	100
27...	990	--	29.0	7.8	103
27...	995	--	29.0	4.6	60
AUG.					
08...	850	7.8	27.0	7.8	100
08...	850	--	27.0	7.2	92
08...	860	--	27.0	6.8	87
SEP.					
06...	800	8.2	26.0	7.6	97
06...	810	--	26.0	6.8	87
06...	800	--	25.0	4.8	61

07301500 NORTH FORK RED RIVER NEAR CARTER, OKLA.

LOCATION.--Lat 34°10'05", long 99°30'25", in NW1/4SE1/4 sec.15, T.8 N., R.22 W., Beckham County, at gaging station at bridge on State Highway 34, 3.0 mi (4.8 km) south of Carter, 10.8 mi (17.4 km) downstream from Timber Creek, and at mile 110.5 (177.8 km).

DRAINAGE AREA.--2,337 sq mi (6,052.8 km²), of which 399 sq mi (1,033.4 km²) is probably noncontributing.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	PHOSPHATE (PO4) (MG/L)
OCT.										
19...	4.7	75	96	0	290	88	--	1.3	.10	.31
25...	174	180	154	0	340	300	.97	4.3	--	--
NOV.										
05...	38	300	144	0	730	470	.50	2.2	--	--
10...	8.8	300	246	0	860	430	--	.60	.23	.72
15...	8.4	330	198	6	900	450	.32	1.4	--	--
25...	131	170	178	0	400	280	1.1	4.8	--	--
DEC.										
05...	173	250	168	0	550	430	.66	2.9	--	--
07...	101	280	216	0	600	470	--	.90	.06	.18
15...	66	310	212	0	760	470	.18	.80	--	--
25...	46	300	226	0	790	450	.47	2.1	--	--
JAN.										
05...	14	330	244	0	780	470	.32	1.4	--	--
13...	46	260	250	0	620	400	.63	2.8	--	--
13...	56	270	264	0	640	400	--	1.5	.14	.44
25...	48	290	234	0	710	420	.54	2.4	--	--
FEB.										
05...	92	290	274	0	820	390	.97	4.3	--	--
11...	68	280	256	0	750	420	--	1.9	.10	.31
15...	62	300	192	0	790	420	.43	1.9	--	--
25...	20	300	222	0	800	460	.25	1.1	--	--
MAR.										
05...	15	320	232	0	850	440	.16	.70	--	--
15...	12	330	218	0	900	440	.23	1.0	--	--
23...	7.3	350	220	0	950	430	--	.40	.02	.06
25...	10	350	218	0	940	460	.32	1.4	--	--
APR.										
05...	5.8	320	204	0	1000	440	.23	1.0	--	--
15...	11	290	202	0	1100	400	.50	2.2	--	--
20...	2.0	290	192	0	1100	380	--	.40	.03	.09
25...	.58	260	172	0	1100	350	.25	1.1	--	--
MAY										
05...	23	200	212	0	530	280	.36	1.6	--	--
05...	23	190	160	0	610	270	--	.20	.07	.21
15...	159	200	210	0	520	280	1.1	4.8	--	--
25...	27	200	208	0	510	270	.9[illegible]	4.2	--	--
JUNE										
01...	195	180	164	0	400	290	--	1.8	.10	.32
05...	38	260	170	0	640	380	.38	1.7	--	--
15...	330	92	168	0	290	130	.81	3.6	--	--
25...	36	210	212	0	590	290	.34	1.5	--	--
JULY										
05...	48	220	196	0	640	300	.38	1.7	--	--
13...	82	180	166	0	350	260	--	1.5	.06	.20
15...	14	240	152	0	550	360	.41	1.8	--	--
23...	.73	210	160	0	870	290	.38	1.7	--	--
AUG.										
01...	.45	48	176	0	200	65	.54	2.4	--	--
23...	7.6	100	136	0	350	130	.99	4.4	--	--
27...	1.6	56	116	0	200	70	.56	2.5	--	--
SEP.										
05...	17	140	132	0	550	200	.75	3.3	--	--
12...	26	66	140	0	260	90	.05	.20	--	--
13...	14	190	272	0	330	320	.20	.90	--	.07

FIELD ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION
OCT.					
19...	1110	7.8	15.0	9.5	98
NOV.					
10...	2700	7.8	15.5	8.8	87
DEC.					
07...	2600	8.4	4.5	10.1	83
JAN.					
13...	2500	8.8	5.5	12.4	100
FEB.					
11...	2500	8.3	.0	14.8	110
MAR.					
23...	3200	8.2	15.0	9.8	105

07301500 NORTH FORK RED RIVER NEAR CARTER, OKLA.

PERIOD OF RECORD.--Chemical analyses: Water years 1951 and 1958-60 (partial-record station), November 1961 to September 1962, July 1968 to current year.
Water temperatures: July 1968 to current year.

REMARKS.--Continuous monitor records for water temperature and specific conductance are collected for this station. No flow Oct. 6-17, July 30, Aug. 3-22, Sept. 26-30.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT.									
19...	690	.94	8.80	340	261	1.8	995	7.9	15.0
25...	1140	1.55	536	480	350	3.6	1760	--	--
NOV.									
05...	2140	2.91	220	860	740	4.5	2780	8.2	--
10...	2220	3.02	53.0	1000	798	4.1	2990	8.1	15.5
15...	2270	3.09	51.4	1000	830	4.5	2990	8.4	--
25...	1250	1.70	442	540	390	3.2	1780	8.4	--
DEC.									
05...	1710	2.33	.79	820	680	3.8	2380	8.3	--
07...	1860	2.53	507	850	673	4.2	2700	7.8	--
15...	2170	2.95	387	940	770	4.4	2890	8.1	--
25...	2160	2.94	268	960	780	4.2	2880	8.2	--
JAN.									
05...	2360	3.21	89.2	1000	800	4.5	3170	8.0	--
13...	1940	2.64	241	870	670	3.8	2610	8.0	--
13...	1830	2.49	267	860	643	4.0	2590	8.2	5.5
25...	2090	2.84	271	940	750	4.1	2810	8.1	--
FEB.									
05...	2170	2.95	539	1000	780	4.0	2880	8.2	--
11...	2000	2.72	367	960	750	3.9	2780	8.3	.0
15...	2070	2.82	346	960	800	4.2	2850	8.3	--
25...	2080	2.83	112	960	780	4.2	2860	8.2	--
MAR.									
05...	2240	3.05	90.7	1000	810	4.4	2940	8.1	--
15...	2230	3.03	72.2	1000	820	4.5	2990	8.0	--
23...	2260	3.07	44.5	1000	820	4.8	3130	8.3	15.0
25...	2290	3.11	61.8	1100	920	4.6	3120	7.8	--
APR.									
05...	2480	3.37	38.8	1200	1000	4.0	3250	7.9	--
15...	2480	3.37	73.6	1200	1000	3.6	3170	7.8	--
20...	2460	3.35	13.2	1210	1050	3.6	3120	8.0	13.5
25...	2540	3.45	3.98	1200	1100	3.3	3090	8.0	--
MAY									
05...	1490	2.03	92.5	690	520	3.3	2060	7.6	--
05...	1560	2.12	969	720	589	3.1	2080	8.1	15.0
15...	1470	2.00	631	680	510	3.3	2020	7.7	--
25...	1410	1.92	103	660	490	3.4	1980	7.7	--
JUNE									
01...	1270	1.73	669	560	425	3.3	1830	8.2	21.0
05...	1800	2.45	185	760	620	4.1	2430	7.8	--
15...	834	1.13	743	420	280	2.0	1190	8.0	--
25...	1540	2.09	150	720	550	3.4	2140	7.9	--
JULY									
05...	1630	2.22	211	770	610	3.5	2250	7.6	30.0
13...	1080	1.47	239	500	364	3.5	1650	7.7	27.5
15...	1540	2.09	58.2	660	540	4.1	2210	7.2	33.0
23...	1910	2.60	3.76	970	840	2.9	2460	8.2	30.0
AUG.									
01...	540	.73	.66	340	200	1.1	843	7.9	--
23...	890	1.21	18.3	450	340	2.1	1300	7.4	--
27...	491	.67	2.12	280	190	1.5	762	8.2	--
SEP.									
05...	1270	1.73	58.3	660	550	2.4	1760	7.6	--
12...	670	.91	47.0	370	260	1.5	989	7.7	--
13...	1140	1.55	43.1	600	380	3.4	1740	7.9	27.0

FIELD ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION
APR.					
20...	2700	8.2	13.5	9.4	100
MAY					
05...	2000	8.2	15.0	9.9	108
JUNE					
01...	1800	7.8	21.0	7.8	96
15...	950	8.2	25.5	7.0	92
JULY					
13...	1780	8.4	27.5	7.2	98
SEP.					
13...	1600	7.2	27.0	7.7	104

07301500 NORTH FORK RED RIVER NEAR CARTER, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2330	2130	2360	2970	2900	2940	3180	1710	1860	1960	853	---
2	1900	2120	2330	2940	2860	2990	3180	2560	1600	1970	812	1030
3	1740	2480	2400	3360	3080	2920	3110	2430	2110	1770	---	1350
4	---	2710	2490	2970	2920	2800	3280	---	2220	1630	---	2180
5	---	2800	2400	3170	2730	2910	3310	2210	2360	2170	---	1740
6	---	2870	2500	3290	2910	2780	3450	2010	2410	2290	---	1980
7	---	3040	2680	3080	2950	2860	3300	2070	2650	2080	---	2430
8	---	3080	2790	2920	2820	2940	3310	2140	2750	2290	---	2730
9	---	2950	2740	2690	2840	3030	3250	2470	2890	2180	---	2080
10	---	3420	2660	2850	2740	2960	3290	2500	2910	1650	---	1840
11	---	3040	2670	2630	2700	2710	3160	2240	2940	1600	---	1510
12	---	3140	2910	2590	2730	3040	3510	1920	3020	1620	---	928
13	---	3050	2840	2690	2620	2970	3430	1690	2670	1580	---	1690
14	---	3620	2810	---	2890	2680	2790	2040	454	2000	---	1910
15	---	2840	2840	---	2780	2900	3180	2020	1120	2200	---	1960
16	---	3090	2770	---	2930	3330	3360	2110	1630	2340	---	2680
17	---	3000	2700	2860	2690	3150	2810	2180	1840	2410	---	---
18	878	1320	2970	2850	2740	3160	2610	2210	1890	2510	---	---
19	2200	1180	2930	2760	2880	3030	3060	2280	1970	2440	---	---
20	1850	1160	2990	2750	2880	3370	3070	2340	1960	2400	---	---
21	1870	1070	2760	2810	2820	3070	3140	2500	1990	2370	---	---
22	1800	1320	2960	2610	2910	3110	3070	2490	1990	2420	---	---
23	1880	1410	2910	2710	2720	2990	3320	2490	1860	2450	---	---
24	1980	2340	3060	2820	2810	3100	3230	1020	1990	---	930	---
25	1710	1820	2910	2860	2890	2930	3020	2160	2130	---	1030	---
26	1670	2210	2940	2910	2860	3040	3220	2620	2120	---	940	---
27	1860	2310	2940	2970	2910	3170	2990	1840	2320	---	1740	---
28	2140	2450	2960	---	2880	3060	2940	2140	2210	---	820	---
29	1870	2580	2750	2990	2890	3160	1640	2510	2080	---	---	---
30	1550	2730	2880	2940	---	3010	2890	1800	2010	3090	---	---
31	2060	---	2870	2920	---	3110	---	1430	---	574	---	---
MONTH	---	2440	2770	2890	2840	3010	3100	2140	2130	2080	---	---

TEMPERATURE (°C) OF WATER, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.0	15.5	---	6.0	---	9.5	13.0	20.0	21.5	34.0	27.0	---
2	23.0	12.5	---	4.5	-0.5	5.5	13.5	19.0	25.0	31.5	26.0	---
3	---	11.0	---	1.5	-0.5	8.0	12.5	21.0	26.0	27.0	---	---
4	---	11.0	---	2.0	0.0	8.0	12.0	20.5	27.0	23.0	---	---
5	---	12.0	---	4.0	2.5	8.0	15.5	17.0	27.0	26.0	---	---
6	---	8.5	---	4.0	3.5	11.0	18.5	20.5	27.5	26.0	---	---
7	---	7.5	---	4.0	1.5	12.0	18.5	19.5	28.0	26.5	---	---
8	---	9.0	---	3.0	3.5	9.5	17.0	21.0	26.5	25.5	---	---
9	---	9.5	---	---	4.5	11.0	16.5	20.0	26.5	25.5	---	---
10	---	10.0	---	---	2.0	14.0	21.5	20.5	27.0	27.5	---	---
11	---	10.5	---	---	1.0	16.5	21.5	17.5	27.0	27.0	---	30.5
12	---	12.0	---	---	4.5	17.5	21.5	17.0	26.0	27.5	---	29.0
13	---	14.0	---	---	6.5	16.0	20.5	18.5	25.0	29.5	---	28.0
14	---	13.5	---	---	7.0	16.0	21.5	19.0	22.5	29.0	---	25.5
15	---	16.0	8.0	---	7.0	14.5	17.0	22.0	25.0	29.5	---	27.0
16	---	16.0	6.0	---	7.5	13.5	19.0	24.5	---	28.5	---	28.0
17	---	15.0	5.0	---	9.0	15.5	19.5	25.5	---	27.5	---	27.5
18	---	9.0	4.5	---	9.0	15.5	21.5	25.0	---	27.0	---	27.0
19	---	6.5	6.5	---	8.0	15.0	22.0	24.0	---	27.5	---	26.0
20	---	7.5	6.0	---	10.0	17.0	16.5	24.5	29.0	27.5	---	24.0
21	---	8.5	5.5	---	12.0	16.0	17.5	25.5	26.0	27.0	---	17.5
22	---	6.5	5.5	---	5.0	16.0	18.0	23.5	24.5	27.5	---	18.0
23	---	5.5	8.0	---	8.5	14.5	17.0	23.0	26.0	28.5	---	20.5
24	---	5.5	---	---	10.0	13.0	18.0	25.5	---	29.0	27.5	22.0
25	---	---	10.0	---	10.5	14.0	16.5	26.0	33.5	29.0	27.0	23.5
26	16.5	---	11.5	---	8.5	16.0	16.0	25.5	31.5	28.0	26.0	---
27	14.5	---	10.0	---	12.0	15.0	17.5	25.0	31.5	28.0	26.0	---
28	16.5	---	10.0	---	12.5	10.0	19.5	25.0	30.0	25.5	25.0	---
29	14.0	5.0	---	---	13.5	9.5	18.5	24.5	28.5	27.5	26.0	---
30	13.0	4.0	6.0	---	---	9.5	19.5	21.5	32.5	26.5	26.0	---
31	12.0	---	6.0	---	---	10.0	---	22.5	---	27.0	---	---
MONTH	---	10.0	---	---	6.5	13.0	18.0	22.0	27.0	27.5	---	---

07301500 NORTH FORK RED RIVER NEAR CARTER, OKLA.--Continued

DISSOLVED SULFATE (SO_4), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	560	490	570	790	770	780	870	350	390	430	220	---
2	410	490	550	780	750	800	870	640	350	430	210	270
3	350	620	590	930	830	770	840	600	480	360	---	350
4	---	700	620	790	770	730	900	---	520	350	---	510
5	---	730	590	860	700	770	910	520	570	500	---	350
6	---	750	620	900	770	720	960	450	590	550	---	440
7	---	820	690	830	780	750	910	470	680	470	---	600
8	---	830	730	770	740	780	910	490	710	550	---	700
9	---	780	710	690	740	810	890	610	760	510	---	470
10	---	950	680	750	710	790	900	620	770	350	---	390
11	---	820	750	670	690	700	860	530	780	350	---	350
12	---	850	770	650	700	820	980	410	810	350	---	240
13	---	820	740	690	670	790	950	350	680	350	---	350
14	---	---	730	---	760	690	730	460	110	440	---	410
15	---	740	740	---	720	770	870	450	300	510	---	430
16	---	830	720	---	780	920	930	480	350	570	---	690
17	---	800	690	750	690	850	730	510	390	590	---	---
18	230	350	790	750	710	860	660	520	400	630	---	---
19	510	310	780	720	760	810	820	540	430	600	---	---
20	390	310	800	710	760	930	830	570	430	590	---	---
21	400	280	720	730	740	830	850	620	440	580	---	---
22	370	350	790	660	770	840	830	620	440	590	---	---
23	400	350	770	700	700	800	920	620	390	600	---	---
24	440	570	820	740	730	840	880	270	440	---	240	---
25	350	380	770	750	760	780	810	500	490	---	270	---
26	350	520	780	770	750	820	880	670	490	---	250	---
27	390	550	780	790	770	860	800	390	560	---	350	---
28	490	600	790	---	760	820	780	490	520	---	210	---
29	400	650	710	800	760	860	350	630	470	---	---	---
30	350	700	760	780	---	800	760	370	450	830	---	---
31	460	---	750	770	---	840	---	350	---	150	---	---
MONTH	---	620	720	760	740	800	840	500	510	490	---	---

DISSOLVED SULFATE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	165	56	53	60	44	19	8.5	207	17	0.27	---
2	1.5	105	43	103	55	39	17	61	125	14	0.11	61
3	0.81	91	65	103	45	35	16	50	107	14	---	23
4	---	92	381	32	52	33	12	---	75	16	---	48
5	---	81	332	33	67	31	14	31	54	46	---	16
6	---	43	290	39	191	25	17	30	37	46	---	14
7	---	26	222	43	177	28	17	35	31	34	---	11
8	---	20	198	52	167	23	15	27	23	25	---	5.7
9	---	20	185	89	185	24	13	30	20	338	---	2.5
10	---	23	176	278	139	23	12	25	16	419	---	133
11	---	19	189	186	129	23	10	21	14	136	---	66
12	---	19	178	129	131	26	10	1610	14	114	---	19
13	---	17	147	102	111	28	7.5	486	64	62	---	13
14	---	---	131	---	164	24	5.1	235	1130	36	---	6.8
15	---	17	138	---	121	25	26	190	468	22	---	3.2
16	---	20	178	---	117	27	20	139	198	15	---	3.3
17	---	22	157	81	80	22	5.5	96	127	12	---	---
18	12	841	162	109	63	21	3.4	64	97	10	---	---
19	414	573	138	83	53	18	3.6	44	92	7.6	---	---
20	252	300	118	119	51	20	4.2	32	76	5.2	---	---
21	41	148	83	129	48	17	4.1	27	63	3.6	---	---
22	10	153	91	102	41	14	3.1	23	56	3.2	---	---
23	3.6	245	79	100	34	16	2.4	180	42	1.8	---	---
24	402	380	95	99	40	23	2.0	44	50	---	1.1	---
25	164	178	75	87	41	21	1.5	36	48	---	4.5	---
26	46	180	97	81	43	19	2.8	32	41	---	8.0	---
27	28	136	116	43	44	18	1.9	32	44	---	1.9	---
28	65	122	98	---	41	15	1.2	326	32	---	0.36	---
29	128	90	100	75	45	14	1.6	532	24	---	---	---
30	284	72	121	95	---	15	35	1190	22	0.00	---	---
31	263	---	59	50	---	19	---	255	---	0.87	---	---
MONTH	---	145	145	92	87	24	10	197	113	56	---	---

07301500 NORTH FORK RED RIVER NEAR CARTER, OKLA.--Continued

DISSOLVED CHLORIDE (CL), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	340	300	350	460	450	460	500	220	250	270	61	---
2	260	300	330	460	440	470	500	380	200	270	53	94
3	230	370	350	540	480	450	490	360	300	230	---	160
4	---	410	370	460	450	430	520	---	320	210	---	310
5	---	430	350	500	420	450	530	320	350	310	---	230
6	---	440	370	520	450	430	550	280	360	330	---	270
7	---	470	410	480	460	440	520	290	400	290	---	360
8	---	480	430	450	430	460	530	300	420	330	---	420
9	---	460	420	410	440	470	510	370	450	310	---	290
10	---	550	400	440	420	460	520	370	450	210	---	250
11	---	470	440	400	410	410	500	320	460	200	---	190
12	---	490	450	390	420	470	560	260	470	210	---	75
13	---	480	440	410	400	460	550	220	400	200	---	220
14	---	580	430	---	450	410	430	290	---	280	---	260
15	---	440	440	---	430	450	500	280	110	320	---	270
16	---	480	420	---	450	530	540	300	210	340	---	410
17	---	470	410	440	410	500	430	310	250	360	---	---
18	66	150	460	440	420	500	390	320	260	370	---	---
19	320	120	450	420	440	470	480	330	270	360	---	---
20	250	120	470	420	440	540	480	340	270	350	---	---
21	250	100	420	430	430	480	490	370	280	350	---	---
22	240	150	460	390	450	490	480	370	280	360	---	---
23	260	170	450	410	410	470	530	370	250	360	---	---
24	270	340	480	430	430	490	510	92	280	---	75	---
25	220	240	450	440	450	450	470	310	300	---	94	---
26	220	320	460	450	440	470	510	400	300	---	77	---
27	250	340	460	460	450	500	470	250	340	---	230	---
28	300	360	460	---	440	480	460	300	320	---	55	---
29	250	390	420	470	450	500	210	370	290	---	---	---
30	190	420	440	460	---	470	450	240	280	480	---	---
31	290	---	440	450	---	490	---	170	---	---	---	---
MONTH	---	360	420	450	440	470	490	300	310	---	---	---

DISSOLVED CHLORIDE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEP	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.79	102	34	31	35	26	11	5.4	132	11	0.07	---
2	0.97	65	26	60	32	23	9.6	36	72	8.8	0.02	21
3	0.53	55	39	59	26	21	9.2	30	66	8.9	---	10
4	---	55	228	19	30	20	7.0	---	46	9.5	---	29
5	---	47	200	19	39	18	7.8	19	33	28	---	10
6	---	25	174	23	112	15	9.7	19	22	28	---	8.9
7	---	15	132	25	104	17	9.6	22	18	21	---	6.7
8	---	11	116	30	98	14	8.4	16	14	15	---	3.4
9	---	12	109	53	108	14	7.4	18	12	208	---	1.6
10	---	13	104	163	82	14	6.8	15	9.6	253	---	86
11	---	11	111	110	76	13	5.9	13	8.2	79	---	35
12	---	11	104	77	77	15	5.9	1020	8.0	67	---	5.9
13	---	9.8	86	61	66	16	4.3	304	38	35	---	8.3
14	---	13	77	---	96	14	3.0	146	---	22	---	4.3
15	---	9.9	81	---	71	15	15	119	176	14	---	2.0
16	---	11	105	---	69	16	12	86	118	9.2	---	2.0
17	---	13	93	48	47	13	3.3	59	82	7.1	---	---
18	3.5	358	95	64	37	12	2.0	39	62	6.1	---	---
19	254	225	81	49	31	11	2.1	27	58	4.6	---	---
20	162	116	69	70	30	12	2.5	19	48	3.1	---	---
21	26	53	49	76	28	9.7	2.4	16	39	2.2	---	---
22	8.5	65	53	60	24	8.3	1.8	14	35	1.9	---	---
23	2.3	116	46	59	20	9.2	1.4	108	27	1.1	---	---
24	253	230	56	58	23	13	1.1	15	31	---	0.32	---
25	105	114	44	51	24	12	0.85	22	29	---	1.6	---
26	28	111	57	47	25	11	1.6	19	25	---	2.5	---
27	18	83	68	25	26	11	1.1	21	26	---	1.2	---
28	40	73	57	---	24	8.7	0.72	201	20	---	0.09	---
29	82	53	59	44	26	8.3	0.96	318	15	---	---	---
30	156	43	71	55	---	8.5	20	771	14	0.00	---	---
31	164	---	35	29	---	11	---	124	---	---	---	---
MONTH	---	71	86	54	51	14	5.8	121	44	---	---	---

07301500 NORTH FORK RED RIVER NEAR CARTER, OKLA.--Continued

DISSOLVED SOLIDS, IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1690	1530	1710	2190	2130	2170	2360	1200	1320	1400	524	---
2	1350	1520	1660	2170	2100	2210	2360	1870	1110	1400	492	663
3	1220	1800	1740	2500	2280	2150	2300	1760	1510	1250	---	915
4	---	1990	1810	2190	2150	2060	2430	---	1600	1140	---	1570
5	---	2060	1740	2350	2000	2140	2460	1590	1710	1560	---	1220
6	---	2110	1820	2440	2140	2040	2570	1430	1750	1650	---	1410
7	---	2240	1960	2280	2170	2100	2450	1480	1940	1490	---	1760
8	---	2280	2050	2150	2070	2170	2460	1540	2020	1650	---	2000
9	---	2170	2010	1970	2090	2240	2410	1800	2130	1570	---	1490
10	---	2540	1950	2100	2010	2180	2440	1820	2140	1150	---	1300
11	---	2240	2110	1920	1980	1990	2340	1620	2170	1110	---	1040
12	---	2320	2140	1890	2000	2240	2610	1360	2230	1130	---	583
13	---	2250	2090	1970	1910	2190	2550	1180	1950	1100	---	1180
14	---	2700	2060	---	2130	1960	2050	1460	210	1430	---	1360
15	---	2090	2090	---	2040	2130	2360	1440	734	1580	---	1400
16	---	2280	2030	---	2160	2470	2500	1510	1140	1690	---	1960
17	---	2210	1980	2100	1970	2330	2060	1570	1300	1750	---	---
18	544	891	2190	2100	2010	2340	1910	1590	1340	1830	---	---
19	1580	781	2160	2020	2120	2240	2260	1650	1400	1770	---	---
20	1310	765	2210	2020	2120	2500	2270	1690	1400	1740	---	---
21	1320	695	2020	2060	2070	2270	2320	1820	1420	1720	---	---
22	1270	891	2180	1910	2140	2300	2270	1810	1420	1760	---	---
23	1330	962	2140	1990	1990	2210	2470	1810	1320	1780	---	---
24	1410	1690	2260	2070	2060	2290	2390	655	1420	---	584	---
25	1200	1280	2140	2100	2130	2160	2230	1550	1530	---	663	---
26	1170	1590	2170	2140	2100	2240	2390	1910	1520	---	592	---
27	1320	1670	2170	2190	2140	2350	2210	1300	1680	---	1220	---
28	1540	1760	2180	---	2120	2260	2170	1540	1590	---	498	---
29	1320	1880	2020	2210	2130	2340	1140	1830	1490	---	---	---
30	1070	2000	2120	2170	---	2220	2130	1270	1430	2280	---	---
31	1470	---	2110	2150	---	2300	---	978	---	304	---	---
MONTH	---	1770	2030	2120	2090	2220	2290	1530	1530	1490	---	---

DISSOLVED SOLIDS (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	516	166	148	167	123	52	29	693	57	0.63	---
2	5.1	329	130	287	153	107	45	176	396	45	0.26	149
3	2.8	268	193	276	123	99	43	148	335	47	---	59
4	---	263	1120	89	145	94	33	---	229	52	---	148
5	---	228	987	89	189	87	36	95	162	143	---	56
6	---	120	850	105	532	72	45	97	109	139	---	46
7	---	73	636	117	493	80	45	112	89	109	---	33
8	---	54	559	145	470	64	39	83	65	76	---	16
9	---	56	526	255	519	66	34	87	55	1050	---	8.0
10	---	60	504	781	396	65	32	74	46	1380	---	449
11	---	52	530	535	368	64	28	65	39	432	---	197
12	---	51	498	373	373	73	28	5300	38	368	---	46
13	---	46	411	292	320	77	20	1640	185	195	---	45
14	---	58	368	---	459	69	14	748	2070	116	---	22
15	---	47	389	---	342	69	70	607	1160	68	---	11
16	---	54	505	---	326	73	55	437	644	46	---	9.5
17	---	60	448	227	229	61	16	296	428	35	---	---
18	29	2140	449	306	179	56	9.8	198	322	30	---	---
19	1270	1430	385	235	149	50	9.8	133	299	22	---	---
20	848	748	328	338	143	54	12	96	249	16	---	---
21	136	364	235	362	134	46	11	79	203	11	---	---
22	34	390	253	293	116	39	8.6	68	180	9.5	---	---
23	12	673	220	284	97	43	6.6	528	142	5.3	---	---
24	1300	1140	262	280	111	62	5.3	108	161	---	2.5	---
25	563	604	208	244	115	58	4.0	113	149	---	11	---
26	154	554	269	226	119	53	7.7	93	127	---	19	---
27	92	410	322	118	121	49	5.1	109	131	---	6.6	---
28	203	361	271	---	114	41	3.5	1020	99	---	0.84	---
29	429	259	283	208	126	39	5.2	1550	76	---	---	---
30	869	205	338	263	---	40	98	4080	70	0.00	---	---
31	836	---	165	139	---	52	---	713	---	1.8	---	---
MONTH	---	387	413	260	246	65	27	630	299	178	---	---

07303400 ELM FORK OF NORTH FORK RED RIVER NEAR CARL, OKLA.

LOCATION.--Lat 35°00'42", long 99°54'12", in SW1/4NW1/4 sec.12, T.6 N., R.26 W., Harmon County, at gaging station at bridge on State Highway 30, 4.0 mi (6.4 km) northeast of Carl, and at mile 54.0 (86.9 km).

DRAINAGE AREA.--416 sq mi (1,077.4 km²).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTAN-TANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
OCT.									
05...	10	13000	98	0	1800	21000	--	--	40100
15...	4.7	21000	78	0	2100	33000	--	--	61200
25...	35	5300	120	0	1300	8500	--	--	16800
NOV.									
05...	16	7300	152	0	1700	12000	--	--	23900
15...	9.8	8400	110	0	1500	14000	--	--	27000
25...	18	6800	154	0	1600	11000	--	--	21200
DEC.									
05...	22	5900	154	0	1600	9200	--	--	18700
15...	24	5100	158	0	1600	7900	--	--	17400
25...	13	7000	82	0	1800	11000	--	--	22000
JAN.									
05...	5.0	10000	172	0	1600	16000	--	--	31300
13...	11	6400	148	0	1600	10000	--	--	19600
25...	10	7300	148	0	1600	12000	--	--	22900
FEB.									
05...	11	8200	162	0	1600	13000	--	--	25400
15...	8.8	7100	142	0	1600	12000	--	--	21500
25...	8.6	8100	104	0	1800	13000	--	--	24400
MAR.									
05...	7.3	8500	112	0	1900	14000	--	--	25500
15...	6.3	10000	100	0	1900	16000	--	--	30800
25...	8.2	9900	102	0	2000	16000	--	--	30600
APR.									
05...	9.0	9600	88	0	1900	16000	--	--	30900
15...	4.8	18000	118	0	2200	28000	--	--	52500
25...	14	22000	92	0	2300	34000	--	--	61200
MAY									
05...	12	6400	128	0	1600	10000	--	--	20200
15...	6.2	3900	138	0	1600	6200	--	--	13000
25...	3.9	2900	110	0	1600	4600	.43	1.9	10500
JUNE									
05...	14	7000	120	0	2000	11000	--	--	22000
15...	68	1100	100	0	1200	1800	.27	1.2	5060
25...	.14	5400	108	0	1600	8500	--	--	17000
JULY									
13...	11	9600	102	0	2000	15000	--	--	27900
25...	3.2	40000	74	0	3000	65000	--	--	112000
AUG.									
05...	1.9	66000	108	0	3400	100000	--	--	18100
15...	9.1	10000	92	0	1800	16000	--	--	30900
24...	5.3	14000	74	0	2200	22000	--	--	40000
SEP.									
05...	46	2600	128	0	1300	4200	--	--	8920
14...	11	7800	94	0	1900	12000	--	--	23600
25...	6.5	9800	92	0	2000	16000	--	--	28700

07303400 ELM FORK OF NORTH FORK RED RIVER NEAR CARL, OKLA.

PERIOD OF RECORD.--Chemical analyses: Water years 1960-61 (partial-record station), November 1961 to September 1962, July 1968 to current year.
Water temperatures: July 1968 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT.								
05...	54.5	1080	3200	3100	100	51200	7.6	--
15...	83.2	777	4200	4100	141	73700	7.5	--
25...	22.8	1590	2000	1900	52	23600	7.7	--
NOV.								
05...	32.5	1030	2700	2600	61	32200	8.0	--
15...	36.7	714	2800	2700	69	36900	7.9	--
25...	28.8	1060	2400	2300	60	29200	7.9	--
DEC.								
05...	25.4	1110	2200	2100	55	25400	7.9	--
15...	23.7	1130	2100	2000	48	22800	8.1	--
25...	29.9	772	2400	2300	62	29500	7.9	--
JAN.								
05...	42.6	422	3000	2900	79	43000	7.4	--
13...	26.7	582	2400	2300	57	27500	7.8	--
25...	31.1	618	2600	2500	62	32100	7.9	--
FEB.								
05...	34.5	754	2600	2500	70	35500	7.9	--
15...	29.2	511	2600	2500	61	30400	7.8	--
25...	33.2	566	2700	2600	68	34500	7.8	--
MAR.								
05...	34.7	503	2900	2800	69	34600	7.9	--
15...	41.9	524	3100	3000	78	40100	8.2	--
25...	41.6	677	3100	3000	77	40000	7.6	--
APR.								
05...	42.0	751	3100	3000	75	41400	8.0	--
15...	71.4	680	4100	4000	122	65600	7.6	--
25...	83.2	2610	4400	4300	144	74900	7.8	--
MAY								
05...	27.5	654	2400	2300	57	27900	7.8	--
15...	17.7	218	2000	1900	38	18500	7.8	--
25...	14.3	110	2000	1900	28	14900	7.7	--
JUNE								
05...	29.9	832	2800	2700	58	30700	8.0	--
15...	6.88	929	1400	1300	13	7180	7.7	--
25...	23.1	643	2400	2300	48	24300	7.9	--
JULY								
13...	37.9	829	3000	2900	76	38400	7.8	26.0
25...	152	968	6800	6700	211	116000	7.6	30.0
AUG.								
05...	24.6	92.8	460	370	1340	154000	7.8	29.0
15...	42.0	759	3000	2900	79	41100	7.5	28.0
24...	54.4	572	3500	3400	103	51900	7.6	30.0
SEP.								
05...	12.1	1110	1800	1700	27	13500	7.9	--
14...	32.1	701	2700	2600	65	32500	8.0	--
25...	39.0	504	3000	2900	78	39400	7.9	--

07303400 ELM FORK OF NORTH FORK OF RED RIVER NEAR CARL, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62400	24000	33100	30500	30000	20400	44000	13700	17000	30100	152000	5520
2	60900	26700	49000	31400	---	23400	46000	25100	20600	9330	159000	2540
3	26700	29500	28000	35000	44800	35900	39200	31400	21700	20200	166000	11100
4	41900	34400	26600	41500	36900	27800	42100	27900	26900	31300	157000	12100
5	52700	33300	26600	45500	34300	29800	47700	27000	30100	33700	149000	13500
6	53500	35000	27600	38200	27000	29300	43400	6330	32600	37000	170000	16100
7	56900	36300	24500	34800	25600	31500	40600	16300	34800	43000	174000	19600
8	56800	38300	24600	24600	33600	30600	43900	26100	38000	25700	17000	20000
9	56700	34200	27800	25400	35600	38200	45700	32100	42100	9830	177000	22800
10	69000	35100	24600	27400	32000	38200	47900	33400	44200	16400	180000	25400
11	70800	35300	27500	29700	31800	38200	50300	32500	45800	23400	181000	27900
12	73200	30900	28500	32300	28700	36300	51000	4590	35700	29900	186000	32500
13	85100	33900	31400	28100	41400	40600	56300	7000	27300	33600	116000	30300
14	78200	26600	29400	28400	30900	43600	57700	11400	7690	34700	50400	31700
15	80300	37600	23600	55900	30900	41600	60800	18300	5650	36700	65800	46700
16	78600	39200	25700	47400	32100	46800	62900	22400	11100	38000	67500	35500
17	54200	33800	28900	28500	32400	47800	71500	22600	12000	66200	104000	38400
18	11200	16100	30300	27200	31600	46600	72800	25000	15600	74200	120000	41100
19	10000	23900	31500	26700	32800	49900	69400	29800	21800	76800	144000	43400
20	24500	29500	31000	29900	33400	41500	63500	32300	21500	83800	---	17800
21	31900	32500	32200	31100	32900	41700	63600	35800	18200	90200	173000	14200
22	28800	36800	28900	31500	34000	47000	67000	36900	25500	99700	159000	21500
23	4820	23700	32100	30100	34300	42700	67300	16400	28800	103000	138000	31100
24	14700	25200	31000	28200	34400	43300	68600	16600	23800	104000	51500	33700
25	23000	29800	30500	32000	35800	40000	75000	28300	23100	116000	41800	37700
26	33700	29400	30900	32700	33100	---	69600	37300	28600	125000	51500	39500
27	10200	31900	30300	44300	32300	41900	48800	6520	32900	135000	32000	40700
28	25800	33000	26400	44700	35300	42300	53500	11600	38300	135000	46500	41000
29	2980	33300	35300	48100	36000	41000	60900	4480	40800	113000	70900	45100
30	9800	32800	29200	29800	---	42300	6810	7320	41000	12500	84800	48400
31	10000	---	28900	11500	---	40800	---	13600	---	140000	3000	---
MONTH	41910	31400	29550	33300	33350	38700	54590	21290	27100	62170	112920	28230

TEMPERATURE (°C) OF WATER, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	7.0	---	10.5	14.5	20.0	29.5	26.0	28.0	26.0
2	---	---	---	4.5	---	7.0	14.0	20.0	26.5	---	29.0	22.5
3	---	---	---	1.5	2.0	10.5	13.5	21.5	---	---	29.5	21.5
4	---	---	---	---	2.5	10.0	13.5	21.0	28.5	---	29.0	25.0
5	---	---	---	2.0	4.5	10.0	17.0	19.5	28.5	---	30.5	28.0
6	---	---	---	0.0	5.0	13.0	19.0	17.0	29.0	---	28.5	28.0
7	---	---	---	2.5	4.0	13.0	19.5	19.5	28.0	---	28.5	30.0
8	---	---	---	4.0	5.5	11.5	17.0	21.5	35.0	---	31.5	30.0
9	---	---	---	5.5	6.5	17.0	17.5	20.5	---	---	31.0	30.0
10	---	---	---	4.5	2.0	15.5	23.0	20.5	---	---	29.0	30.0
11	---	---	---	4.5	3.0	18.5	21.5	17.5	---	---	28.5	30.0
12	---	---	---	6.0	6.5	19.5	21.0	18.5	---	---	29.5	30.5
13	22.5	---	---	2.5	7.5	17.5	20.5	19.0	---	---	27.0	30.5
14	19.0	---	---	-0.5	8.0	18.0	22.0	21.0	---	---	28.5	30.0
15	21.5	---	---	---	7.5	16.0	18.0	24.0	---	---	29.5	32.0
16	24.0	---	7.5	-0.5	9.0	15.0	19.5	25.5	---	---	29.0	19.0
17	23.0	---	---	3.0	10.5	17.0	19.0	25.5	---	---	29.5	12.5
18	20.5	10.0	4.0	6.5	9.5	17.0	21.5	25.5	---	---	30.0	11.5
19	16.5	8.0	6.5	6.5	8.5	16.5	22.0	24.0	---	---	---	10.5
20	17.0	9.5	5.5	6.5	11.5	19.0	---	24.5	---	---	30.0	25.5
21	17.5	10.0	6.0	5.0	12.0	18.0	17.5	25.5	29.5	---	30.0	18.5
22	17.5	7.0	6.0	6.0	6.5	17.5	---	25.0	27.5	---	30.5	20.5
23	17.0	7.5	9.0	8.0	11.0	16.0	17.5	25.5	27.5	---	30.0	20.0
24	17.0	7.5	11.0	7.0	11.5	---	18.0	25.5	29.0	---	27.5	22.0
25	18.0	7.5	12.0	4.0	12.5	---	16.0	26.0	31.5	---	26.5	23.5
26	---	8.5	12.0	4.5	10.5	---	17.0	25.0	29.5	---	25.0	21.0
27	---	8.0	11.0	-0.5	12.5	---	19.0	20.0	31.0	32.0	24.5	22.0
28	---	8.0	7.5	-0.5	14.0	---	20.0	25.0	28.5	28.0	25.5	24.0
29	---	---	9.0	---	15.0	---	20.0	21.5	26.5	29.5	28.0	18.5
30	---	---	6.5	---	---	10.5	16.5	22.0	28.0	29.5	28.5	16.5
31	---	---	7.0	---	---	11.0	---	19.5	---	---	25.0	---
MONTH	---	---	---	3.0	8.0	14.5	18.5	22.0	---	---	28.5	23.5

07303400 ELM FORK OF NORTH FORK OF RED RIVER NEAR CARL, OKLA.--Continued

DISSOLVED SULFATE (SO_4), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2300	1800	1900	1900	1900	1700	2000	1500	1700	1900	3500	940
2	2300	1800	2100	1900	---	1800	2100	1800	1700	1200	3600	820
3	1800	1900	1800	1900	2100	1900	2000	1900	1800	1700	3600	1300
4	2000	1900	1800	2000	2000	1800	2000	1800	1800	1900	3500	1400
5	2200	1900	1800	2100	1900	1900	2100	1800	1900	1900	3400	1500
6	2200	1900	1800	2000	1800	1900	2000	1000	1900	2000	3700	1600
7	2200	1900	1800	1900	1800	1900	2000	1400	1900	2000	3600	1700
8	2200	2000	1800	1800	1900	1900	2000	1800	2000	1800	1700	1700
9	2200	1900	1800	1800	1900	2000	2100	1900	2000	1200	3800	1800
10	2400	1900	1800	1600	1900	2000	2100	1900	2100	1600	3800	1800
11	2400	1900	1800	1900	1900	2000	2100	1900	2100	1800	3800	1800
12	2400	1900	1800	1900	1600	1900	2100	940	1900	1900	3900	1900
13	2600	1900	1900	1800	2000	2000	2200	1100	1800	1900	3000	1900
14	2500	1800	1900	1800	1900	2000	2200	1300	1100	1900	2100	1900
15	2500	2000	1800	2200	1900	2000	2300	1700	1000	2000	2300	2100
16	2500	2000	1800	2100	1900	2100	2300	1800	1300	2000	2400	1900
17	2200	1900	1900	1800	1900	2100	2400	1800	1400	2300	2800	2000
18	1300	1600	1900	1800	1900	2100	2400	1800	1600	2400	3000	2000
19	1300	1800	1900	1800	1900	2100	2400	1900	1800	2500	3400	2000
20	1800	1900	1900	1900	1900	2000	2300	1900	1800	2600	---	1700
21	1900	1900	1900	1900	1900	2000	2300	1900	1700	2700	3700	1500
22	1800	2000	1900	1900	1900	2100	2300	2000	1800	2800	3600	1800
23	950	1800	1900	1900	1900	2000	2400	1600	1800	2800	3300	1900
24	1500	1800	1900	1800	1900	2000	2400	1600	1800	2800	2100	1900
25	1800	1900	1900	1900	1900	2000	2500	1800	1800	3000	2000	2000
26	1900	1900	1900	1900	1900	---	2400	2000	1800	3100	2100	2000
27	1300	1900	1900	2100	1900	2000	2100	1100	1900	3200	1900	2000
28	1800	1900	1800	2100	1900	2000	2200	1400	2000	3200	2100	2000
29	840	1900	1900	2100	1900	2000	2300	930	2000	3000	2400	2100
30	1200	1900	1900	1900	---	2000	1100	1100	2000	1400	2600	2100
31	1300	---	1900	1300	---	2000	---	1500	---	3300	840	---
MONTH	1900	1900	1900	1900	1900	2000	2200	1600	1800	2300	2900	1800

DISSOLVED SULFATE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	149	62	66	65	31	49	239	162	38	21	678
2	51	118	86	66	---	30	50	92	127	66	19	663
3	88	100	144	63	40	37	45	61	95	370	21	485
4	87	88	103	18	52	35	43	48	84	96	41	268
5	64	82	108	28	62	37	49	379	76	67	20	205
6	51	68	99	59	59	39	52	814	67	58	19	175
7	41	68	92	88	41	38	47	141	57	48	20	149
8	33	64	97	97	48	36	41	83	44	45	8.6	126
9	30	62	94	78	49	39	38	71	52	367	23	119
10	33	57	87	64	39	40	40	98	50	230	23	117
11	32	57	89	60	39	45	39	1520	48	134	23	84
12	31	56	80	61	55	43	39	4780	58	106	23	67
13	32	57	76	55	52	42	33	621	647	72	28	61
14	31	48	120	42	45	44	32	380	5110	52	109	56
15	32	52	159	40	43	34	28	300	427	45	88	62
16	32	54	98	90	49	33	25	248	243	40	40	50
17	41	150	85	70	49	31	25	219	182	39	27	45
18	1940	175	76	79	46	29	24	180	163	33	20	38
19	383	101	76	64	44	35	24	126	138	28	16	32
20	218	80	76	60	45	36	22	102	118	29	---	115
21	143	77	72	56	45	36	24	89	115	29	21	163
22	170	127	70	61	40	39	22	95	97	29	45	99
23	937	144	71	60	44	42	20	172	75	27	38	61
24	307	117	66	55	42	45	19	71	144	28	48	50
25	172	90	66	51	45	44	20	60	86	26	60	45
26	129	80	66	51	40	---	37	275	70	24	32	41
27	257	66	66	31	40	42	50	2470	56	21	49	43
28	176	62	59	29	39	42	30	299	48	24	39	40
29	1130	62	68	57	41	44	1060	3090	43	29	31	36
30	481	62	70	65	---	45	1060	661	43	11	38	31
31	173	---	65	40	---	47	---	278	---	21	4620	---
MONTH	238	86	85	58	46	39	103	583	291	72	187	140

07303400 ELM FORK OF NORTH FORK OF RED RIVER NEAR CARL, OKLA.--Continued

DISSOLVED CHLORIDE (CL), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27500	9500	13800	12500	12300	7800	18900	4700	6200	12400	96700	1400
2	26800	10800	21200	13000	---	9200	19800	10000	7900	2600	102700	630
3	10800	12100	11400	14700	19300	15100	16600	13000	8400	7700	108800	3500
4	17900	14400	10700	17700	15500	11300	18000	11300	10900	12900	101000	3900
5	23000	13900	10700	19600	14300	12200	20600	10900	12400	14000	94100	4600
6	23300	14700	11200	16200	10900	12000	18600	1600	13500	15600	112200	5800
7	24900	15300	9700	14600	10300	13000	17300	5900	14600	18400	115700	7400
8	24900	16200	9800	9800	14000	12600	18800	10500	16100	10300	6200	7600
9	24800	14300	11300	10200	14900	16200	19700	13300	18000	2900	118300	8900
10	30600	14700	9800	11100	13300	16200	20700	13900	19000	5900	120900	10200
11	31400	14800	11100	12200	13200	16200	21800	13500	19700	9200	121700	11300
12	32900	12700	11600	13400	11700	15300	22200	1100	15000	12300	101300	13500
13	41600	14100	13000	11400	17700	17300	24600	1700	11000	14000	65600	12500
14	36600	10700	12000	11600	12700	18700	25300	3600	1900	14500	21900	13100
15	38100	15900	9300	24500	12700	17800	26800	6800	1400	15500	29100	20100
16	36900	16600	10300	20500	13300	20200	27700	8800	3500	16100	29900	14900
17	23700	14100	11800	11600	13400	20700	31800	8800	3900	29300	55500	16300
18	3500	5800	12500	11000	13100	20100	32600	10000	5600	33600	69100	17500
19	2900	9500	13000	10800	13600	21600	30800	12200	8500	35500	89800	18600
20	9700	12100	12800	12300	13900	17700	28000	13400	8300	40700	---	6600
21	13200	13500	13300	12800	13700	17800	28100	15000	6800	45400	114800	4900
22	11800	15500	11800	13000	14200	20300	29700	15500	10200	52400	102700	8300
23	1200	9400	13300	12400	14300	18300	29800	5900	11800	54800	84600	12800
24	5100	10100	12800	11500	14400	18500	30400	6000	9400	55500	22400	14000
25	9000	12200	12500	13300	15000	17000	34200	11500	9100	65600	17800	15900
26	14000	12000	12700	13600	13800	---	30900	15700	11700	73400	22400	16800
27	3000	13200	12500	19000	13400	17900	21100	1600	13700	82000	13300	17300
28	10300	13700	10600	19200	14800	18100	23300	3700	16200	82000	20000	17500
29	750	13900	14800	20800	15100	17500	26800	1100	17400	63000	31500	19400
30	2800	13600	11900	12200	---	18100	1700	1800	17500	4100	41400	20900
31	2900	---	11800	3600	---	17400	---	4600	---	86300	750	---
MONTH	18300	13000	12100	13900	13900	16400	23900	8300	11000	31900	67700	11500

DISSOLVED CHLORIDE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	661	795	446	440	432	137	454	757	604	254	574	943
2	608	698	859	455	---	157	481	514	576	142	555	515
3	523	652	891	475	374	285	377	420	455	1650	617	1270
4	773	660	608	158	411	216	379	294	498	663	1170	762
5	682	599	637	264	464	241	484	2270	501	493	559	643
6	548	514	604	480	353	249	472	1240	475	463	576	626
7	458	536	499	668	235	264	401	509	433	437	625	643
8	369	525	528	528	352	241	381	481	360	256	32	556
9	342	463	579	439	379	323	361	503	461	841	703	603
10	421	437	475	389	275	327	391	713	461	834	718	658
11	416	439	541	394	274	371	395	10780	458	697	723	520
12	417	378	502	434	348	334	401	5850	445	695	602	473
13	517	420	525	339	453	359	366	1010	3910	529	620	403
14	454	284	780	265	303	399	362	1020	8770	392	1120	389
15	484	420	830	442	292	302	332	1200	603	359	1100	598
16	478	449	556	884	345	316	307	1230	634	330	508	382
17	441	1100	541	439	348	307	334	1100	513	490	525	369
18	5120	626	504	475	317	282	326	996	571	454	448	331
19	896	536	527	378	313	356	316	825	663	403	436	291
20	1180	522	518	397	330	320	272	723	562	461	---	445
21	998	546	504	381	325	317	295	690	458	490	651	530
22	1080	1000	446	422	299	378	280	756	551	537	1300	472
23	1190	758	503	400	329	375	249	625	476	533	982	416
24	1030	652	449	341	311	406	246	261	762	540	496	368
25	878	594	440	358	349	376	277	373	441	567	530	361
26	948	520	447	367	286	---	484	2210	441	555	333	349
27	614	463	437	288	282	372	502	3840	406	532	343	374
28	1010	444	344	270	300	376	328	816	394	598	379	349
29	998	449	519	562	323	387	12520	3720	375	630	408	340
30	1100	441	451	429	---	400	1690	1100	377	31	604	311
31	404	---	414	108	---	408	---	874	---	536	4110	---
MONTH	840	564	545	409	336	319	815	1540	888	529	745	510

07303400 ELM FORK OF NORTH FORK OF RED RIVER NEAR CARL, OKLA.--Continued

DISSOLVED SOLIDS, IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49020	16830	23380	21510	21150	14240	31450	9420	11790	21220	172890	3530
2	47590	18770	36230	22150	---	16400	33360	17620	14380	6270	184540	1390
3	18770	20790	19710	24740	32220	25390	27770	22150	15170	18100	196200	7550
4	29710	24310	18700	29420	26110	19560	29850	19640	18920	22080	181210	8270
5	39760	23520	18700	32890	24240	21000	34990	18990	21220	23810	167900	9270
6	40520	24740	19420	27050	18990	20640	30880	4110	23020	26180	202850	11150
7	43770	25680	17190	24600	17980	22230	28770	11290	24600	30500	209510	13660
8	43670	27120	17260	17260	23740	21580	31360	18340	26900	18050	11790	13950
9	43580	24170	19560	17840	25180	27050	33080	22660	29850	6630	214510	15970
10	55320	24820	17260	19280	22590	27050	35180	23590	31650	11360	219500	17840
11	57040	24960	19350	20930	22440	27050	37470	22950	33170	16400	224730	19640
12	59330	21790	20070	22800	20210	25680	38140	2860	25250	21070	250890	22950
13	70690	23950	22150	19780	29350	28770	43200	4600	19200	23740	112960	21360
14	68100	18700	20710	20000	21790	31070	44530	7760	5090	24530	37560	22370
15	66100	26610	16540	42810	21790	29490	47490	12730	3630	25970	52260	34030
16	64480	27770	18050	34700	22660	34130	49500	15680	7550	26900	53890	25100
17	41190	23880	20350	20070	22870	35080	57700	15820	8200	52650	92990	27190
18	7620	11150	21360	19130	22300	33940	58950	17550	10790	60280	119620	29130
19	6750	16760	22230	18770	23160	37090	55700	21000	15250	62760	159570	30880
20	17190	20790	21870	21070	23590	29420	50070	22800	15030	69450	---	12370
21	22510	22950	22730	21940	23230	29560	50160	25320	12660	75550	207850	9780
22	20280	26040	20350	22230	24020	34320	53410	26110	17910	85830	184540	15030
23	3030	16610	22660	21220	24240	30280	53700	11360	20280	91320	149590	21940
24	10140	17690	21870	19850	24310	30790	54940	11500	16690	92990	38610	23810
25	16110	21000	21510	22590	25320	28340	61050	19920	16180	112960	29640	26690
26	23810	20710	21790	23090	23380	---	55890	26400	20140	127950	38610	27980
27	6900	22510	21360	31740	22800	29710	36040	4250	23230	144590	22590	28850
28	18120	23300	18560	32120	24960	30000	40520	7910	27120	144590	33840	29060
29	1710	23520	24960	35370	25460	29060	47590	2780	28920	107970	57130	32500
30	6610	23160	20570	21000	---	30000	4460	4830	29060	8550	70400	35650
31	6760	---	20350	7840	---	28920	---	9350	---	152910	1720	---
MONTH	32330	22150	20860	23730	23570	27590	41910	14880	19090	55130	123330	19960

DISSOLVED SOLIDS (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1180	1410	757	755	742	250	756	1530	1150	435	1030	2410
2	1080	1220	1470	778	---	279	811	904	1050	339	997	1130
3	912	1120	1540	802	626	480	630	718	819	3010	1110	2770
4	1280	1120	1060	262	691	375	629	509	868	1130	2100	1610
5	1180	1020	1110	444	785	414	822	3950	659	836	997	1300
6	952	869	1050	803	615	429	764	3220	808	778	1040	1200
7	804	901	882	1130	413	450	668	975	731	725	1130	1180
8	649	879	932	932	596	414	635	842	603	448	60	1020
9	600	783	1000	771	639	540	607	856	766	1950	1270	1080
10	762	737	839	677	470	548	665	1210	769	1600	1300	1160
11	755	741	940	678	467	621	678	18340	770	1240	1330	901
12	753	647	867	739	600	562	690	14600	750	1190	1490	805
13	878	711	897	587	753	598	641	2640	6790	897	1070	692
14	796	495	1340	459	518	663	637	2200	23240	662	1930	664
15	839	704	1470	774	500	502	590	2230	1550	603	1980	1010
16	836	750	975	1500	587	534	548	2200	1390	552	917	644
17	767	1870	934	759	593	521	608	1970	1080	881	879	617
18	11150	1200	865	826	542	476	589	1750	1110	814	775	551
19	2060	950	900	659	532	611	571	1420	1190	712	776	484
20	2090	898	886	683	561	532	487	1230	1010	788	---	835
21	1700	929	859	652	552	527	528	1160	854	816	1180	1060
22	1860	1690	769	720	586	639	505	1270	967	881	2340	852
23	2980	1350	856	687	556	621	449	1200	821	888	1740	711
24	2030	1150	767	590	525	673	445	497	1350	904	855	624
25	1570	1020	755	610	588	627	494	646	786	976	880	605
26	1610	895	765	623	486	---	875	3710	761	967	573	582
27	1800	790	750	480	480	618	856	10010	690	937	585	623
28	1760	755	601	451	505	624	569	1750	659	1050	640	581
29	2280	762	876	955	543	643	22230	9240	625	1080	740	570
30	2550	750	778	737	---	664	4420	2910	628	65	1030	529
31	930	---	714	233	---	679	---	1770	---	950	9440	---
MONTH	1640	970	942	702	570	537	1480	3140	1850	939	1410	960

07303500 ELM FORK OF NORTH FORK RED RIVER NEAR MANGUM, OKLA.

LOCATION.--Lat 34°55'36", long 99°30'00", on east line sec.10, T.5 N., R.22 W., Greer County, at gaging station at bridge on U.S. Highway 283, 3.0 mi (4.8 km) north of Mangum, 5.0 mi (8.0 km) downstream from Haystack Creek, and at mile 17.8 (28.6 km).

DRAINAGE AREA.--838 sq mi (2,170.4 km²).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
OCT.									
05...	15	7500	106	0	1600	12000	--	--	20400
15...	4.2	7400	110	0	1900	12000	--	--	24500
25...	59	1200	94	0	930	1900	.41	1.8	4690
NOV.									
05...	22	4600	72	0	1400	7200	--	--	15100
15...	12	7000	88	0	1800	11000	--	--	23600
25...	22	6200	140	0	1500	9900	--	--	20200
DEC.									
05...	30	6800	114	0	1500	11000	--	--	22100
15...	124	5200	146	0	1400	8100	--	--	16900
25...	15	6300	76	0	1700	10000	--	--	20000
JAN.									
05...	5.6	7000	136	0	1800	11000	--	--	22100
15...	5.0	7400	108	0	1800	12000	--	--	22200
25...	9.5	7000	96	0	1700	11000	--	--	21400
FEB.									
05...	8.0	6600	120	0	1800	11000	--	--	20800
15...	8.2	6700	106	0	1800	11000	--	--	21900
25...	7.1	7600	104	0	1900	12000	--	--	23900
MAR.									
05...	5.7	7600	90	0	1800	12000	--	--	25200
15...	5.6	8600	92	0	2100	14000	--	--	26600
25...	6.3	9400	108	0	2100	15000	--	--	27800
APR.									
05...	6.2	9500	58	0	2100	15000	--	--	28800
14...	4.1	10000	144	0	2100	16000	--	--	31800
25...	1.8	9500	152	0	2200	15000	--	--	28900
MAY									
05...	15	4800	76	0	1600	7600	--	--	16400
15...	117	1300	100	0	1100	2100	.38	1.7	5600
25...	40	5200	118	0	1800	8200	--	--	17800
JUNE									
05...	27	3400	120	0	1500	5500	--	--	12000
15...	1120	93	98	0	640	140	.61	2.7	1150
25...	59	2100	118	0	1400	3400	.32	1.4	8000
JULY									
05...	36	1800	94	0	1300	2800	.29	1.3	6610
15...	11	5500	112	0	1800	8800	--	--	17900
25...	2.6	6500	112	0	2200	11000	--	--	21300
AUG.									
05...	1.4	6300	96	0	2200	10000	--	--	21000
15...	12	4000	88	0	1800	6500	--	--	13700
25...	.82	7000	94	0	2200	11000	--	--	22400
SEP.									
05...	53	1400	94	0	990	2200	.16	.70	5320
15...	16	5300	118	0	1800	8600	--	--	17200
24...	15	4800	112	0	1700	7700	--	--	15900

07303500 ELM FORK OF NORTH FORK RED RIVER NEAR MANGUM, OKLA.

PERIOD OF RECORD.--Chemical analyses: Water year 1960 (partial-record station), November 1961 to August 1963, July 1968 to current year.
Water temperatures: July 1968 to current year.

REMARKS.--Continuous monitor records for water temperature and specific conductance are collected for this station.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.							
05...	33.2	732	2600	2500	68	34200	8.0
15...	33.3	206	3000	2900	59	33200	8.0
25...	6.30	553	1200	1100	15	7220	7.9
NOV.							
05...	20.5	664	2100	2000	44	21000	8.0
15...	32.1	566	2800	2700	58	31500	8.0
25...	27.5	869	2300	2200	56	27400	8.1
DEC.							
05...	30.1	1330	2300	2200	62	29200	7.9
15...	23.0	4190	2000	1900	51	23000	7.6
25...	27.2	600	2400	2300	56	27200	7.9
JAN.							
05...	30.1	248	2800	2700	58	30800	7.7
15...	30.2	222	2800	2700	61	30900	7.8
25...	29.1	407	2600	2500	60	30800	7.7
FEB.							
05...	28.3	333	2700	2600	55	29100	7.9
15...	29.8	359	2800	2700	55	30400	7.9
25...	32.5	339	2900	2800	61	33100	7.9
MAR.							
05...	34.3	287	3000	2900	60	34200	7.9
15...	36.2	402	3200	3100	66	36400	8.0
25...	37.8	350	3400	3300	70	38800	7.7
APR.							
05...	39.2	357	3400	3400	71	39900	7.9
18...	43.2	261	3700	3600	72	42800	7.8
25...	39.3	104	3700	3600	68	40000	7.8
MAY							
05...	22.3	1310	2400	2300	43	22100	8.0
15...	7.62	1420	1400	1300	15	7960	7.8
25...	24.2	648	2500	2400	45	23600	7.9
JUNE							
05...	16.3	648	2100	2000	32	17100	7.9
15...	1.56	.25	770	690	1.5	1720	7.6
25...	10.9	944	1900	1800	21	11600	7.6
JULY							
05...	8.00	642	1600	1500	20	9910	7.4
15...	24.3	532	2700	2600	46	25100	7.6
25...	29.0	150	3200	3100	50	28800	7.7
AUG.							
05...	28.6	59.0	3200	3100	48	28800	8.2
15...	18.6	444	2500	2400	35	19400	7.5
25...	30.5	49.6	3300	3200	53	30400	8.0
SEP.							
05...	7.24	761	1300	1200	17	8340	7.9
15...	23.6	743	2600	2500	45	23900	7.7
26...	21.6	644	2500	2400	42	22300	7.5

07303500 ELM FORK NORTH FORK RED RIVER NEAR MANGUM, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25300	6510	30200	29600	34400	38400	45900	5650	6600	24200	29800	8870
2	22300	11200	26800	30100	31200	34600	42400	6850	9800	27200	29900	2030
3	8990	14100	26000	29600	32000	37700	42100	11100	12600	24000	29400	2890
4	17500	16800	25400	31100	29800	36400	42000	16800	16900	12900	28700	4540
5	32200	19200	30100	30800	28500	35900	42300	20900	18300	11900	30100	8340
6	30500	21700	24500	29000	31600	30800	42900	20000	19400	13800	30100	11100
7	30700	23600	24000	28200	37800	36400	43100	4850	20700	18700	29000	13200
8	30400	25500	26200	31200	30500	37200	43200	5460	22400	21600	29600	15000
9	32900	27000	26700	34000	31200	37800	37800	10200	23800	22500	26800	17000
10	33500	26700	27200	29300	30000	38100	38100	17600	25900	24800	28100	18600
11	33600	29600	27200	27300	31200	38100	38100	22000	26000	12400	28700	10900
12	34800	29900	27600	27600	31200	38400	38400	4130	26700	12300	28400	19900
13	31100	31500	28500	29300	32100	38300	38300	2490	27700	14600	28300	21800
14	35300	31700	27700	---	33300	38600	38600	4620	4170	23000	27600	22600
15	33600	32300	23800	30900	31200	39500	39500	7590	1340	25700	20400	24200
16	34100	32600	10000	32600	32000	39600	39600	9890	3460	24700	21600	25400
17	32700	32300	27400	30100	33000	39800	39800	13000	6110	25300	42300	26300
18	24100	34100	17800	30200	33400	38600	38600	15200	8780	27600	38200	27100
19	6800	23400	22200	36600	32800	39700	39700	17100	9460	27300	31100	28400
20	5130	---	24600	31900	35400	41100	41100	19200	12400	33700	30900	27200
21	9050	22700	24500	27500	34000	40000	40000	20600	14400	31300	31200	28800
22	15000	24100	25400	28800	33200	40900	40900	15400	16600	29500	30500	30200
23	7630	26300	25900	29800	34500	40600	40600	20400	14500	29300	32400	25500
24	6030	23800	26500	30600	33600	40500	40500	7820	18600	28100	32200	22000
25	6990	28100	26200	31400	33400	40800	40900	26700	15500	28700	27600	24800
26	9000	25400	25900	31700	32700	41300	37600	24800	19400	29300	28400	24400
27	10800	26200	28800	31700	33800	42200	32200	12300	18800	29400	16500	28600
28	19600	28100	29200	31300	30300	41200	37400	3220	20000	29300	28200	29600
29	5350	29500	28900	31100	37500	42100	41500	3540	23700	29500	41400	35700
30	3030	30200	29400	30400	---	41600	34300	2070	22900	29100	37700	26000
31	3680	---	28300	34200	---	41600	---	3510	---	29600	34700	---
MONTH	20380	25310	25870	30600	32610	38960	39880	12100	16230	24240	29990	20350

TEMPERATURE (°C) OF WATER, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.5	16.0	---	---	2.5	11.0	14.5	19.5	27.5	29.5	29.0	---
2	23.0	14.0	---	---	0.5	7.0	15.0	20.0	25.5	30.0	28.5	---
3	20.5	12.0	---	---	-0.5	9.0	15.0	21.5	26.5	28.0	28.0	---
4	19.5	12.0	---	---	1.5	9.5	14.0	21.5	27.0	24.5	29.0	---
5	20.0	13.0	---	---	3.5	9.5	17.0	20.5	28.0	25.0	30.0	---
6	20.0	9.5	---	---	5.0	12.0	22.5	21.0	27.5	26.5	29.5	---
7	20.5	8.0	---	---	3.0	13.5	20.5	19.5	27.5	27.5	31.0	---
8	19.5	10.0	---	---	5.0	11.0	18.5	21.0	26.5	27.5	33.0	---
9	18.0	10.5	---	---	6.0	12.5	17.5	21.5	26.0	29.5	35.0	---
10	17.0	11.0	---	---	3.0	15.5	23.0	21.5	26.0	29.5	36.0	---
11	18.5	15.5	---	---	2.0	18.0	23.0	18.5	26.5	29.0	37.0	---
12	19.5	15.0	---	---	5.5	19.5	19.5	17.0	26.0	30.5	37.0	---
13	19.5	---	---	---	7.5	18.0	22.0	19.0	26.0	31.5	37.0	---
14	18.5	---	---	---	8.5	17.5	22.5	20.5	22.5	31.0	37.0	---
15	20.5	---	---	---	7.0	16.5	19.0	23.5	26.5	30.5	37.5	---
16	22.0	---	---	---	8.5	15.5	20.0	25.5	27.5	30.0	23.5	---
17	22.0	---	---	---	10.0	17.0	20.5	26.0	27.5	29.0	18.5	---
18	21.0	---	---	---	9.5	17.5	22.0	26.0	27.5	28.5	18.0	---
19	18.0	---	---	---	8.5	16.5	24.0	24.5	28.5	30.0	18.0	---
20	16.5	---	---	---	11.0	18.5	18.5	25.0	28.5	29.5	18.5	---
21	17.0	---	---	---	12.5	18.0	19.0	26.0	26.5	30.0	18.0	---
22	17.5	---	---	---	6.0	18.0	18.5	25.0	29.5	31.5	17.0	---
23	16.0	---	---	---	10.0	16.5	19.0	24.5	29.5	34.5	17.5	---
24	16.0	---	---	---	11.0	15.5	19.0	24.5	30.5	36.5	17.0	---
25	16.5	---	---	---	11.5	15.5	17.5	26.0	32.5	36.0	---	---
26	17.0	---	---	---	9.5	17.5	16.5	25.5	32.0	34.0	---	21.5
27	15.5	---	---	---	11.5	17.5	19.5	22.5	32.5	33.0	---	23.0
28	16.5	---	---	---	13.0	12.5	21.0	24.0	31.5	28.5	---	24.0
29	13.5	---	---	1.5	14.5	12.0	20.5	---	29.0	29.5	---	21.0
30	12.0	---	7.5	2.0	---	10.5	19.5	---	30.5	29.5	---	18.0
31	12.5	---	5.0	1.5	---	11.0	---	---	---	30.5	---	---
MONTH	18.5	---	---	---	7.0	14.5	19.5	22.5	28.0	30.0	---	---

07303500 ELM FORK NORTH FORK RED RIVER NEAR MANGUM, OKLA.--Continued

DISSOLVED SULFATE (SO_4), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1700	800	1800	1800	1900	1900	2100	740	810	1700	1800	930
2	1600	1100	1700	1800	1800	1900	2000	820	1000	1700	1800	500
3	960	1300	1700	1800	1800	1900	2000	1100	1200	1700	1800	560
4	1500	1500	1700	1800	1800	1900	2000	1500	1500	1200	1800	670
5	1800	1600	1800	1800	1800	1900	2000	1600	1600	1200	1800	920
6	1800	1600	1700	1800	1800	1800	2000	1600	1600	1300	1800	1100
7	1800	1700	1700	1800	1900	1900	2000	690	1600	1600	1800	1200
8	1800	1700	1700	1800	1800	1900	2000	730	1600	1600	1800	1400
9	1800	1700	1700	1900	1800	1900	1900	1000	1700	1600	1700	1500
10	1900	1700	1700	1800	1800	1900	1900	1500	1700	1700	1800	1600
11	1900	1800	1700	1700	1800	1900	1900	1600	1700	1200	1800	1100
12	1900	1800	1700	1700	1800	1900	1900	640	1700	1200	1800	1600
13	1800	1800	1800	1800	1800	1900	1900	530	1700	1300	1800	1600
14	1900	1800	1700	---	1800	1900	1900	670	640	1700	1700	1600
15	1900	1800	1700	1500	1800	2000	2000	870	---	1700	1600	1700
16	1900	1800	1000	1800	1800	2000	2000	1000	600	1700	1600	1700
17	1800	1800	1700	1800	1800	2000	2000	1200	770	1700	2000	1700
18	1700	1900	1500	1800	1900	1900	1900	1400	950	1700	1900	1700
19	820	1700	1600	1900	1800	2000	2000	1500	990	1700	1800	1800
20	710	---	1700	1800	1900	2000	2000	1600	1200	1900	1800	1700
21	970	1600	1700	1700	1900	2000	2000	1600	1300	1800	1800	1800
22	1400	1700	1700	1800	1800	2000	2000	1400	1500	1800	1800	1800
23	870	1700	1700	1800	1900	2000	2000	1600	1300	1800	1800	1700
24	770	1700	1700	1800	1900	2000	2000	890	1600	1800	1800	1600
25	830	1800	1700	1800	1900	2000	2000	1700	1400	1800	1700	1700
26	960	1700	1700	1800	1800	2000	1900	1700	1600	1800	1800	1700
27	1100	1700	1800	1800	1900	2000	1800	1200	1600	1800	1500	1800
28	1600	1800	1800	1800	1800	2000	1900	580	1600	1800	1800	1800
29	720	1800	1800	1800	1900	2000	2000	600	1700	1800	2000	1900
30	570	1800	1800	1800	---	2000	1900	500	1700	1800	1900	1700
31	610	---	1800	1900	---	2000	---	600	---	1800	1900	---
MONTH	1400	1700	1700	1800	1800	2000	2000	1100	1400	1600	1800	1500

DISSOLVED SULFATE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69	185	82	67	56	30	41	935	149	72	7.7	2210
2	239	153	98	68	24	27	39	302	123	70	7.2	597
3	190	123	139	62	15	30	36	140	120	212	7.2	463
4	103	120	142	27	24	29	35	88	124	274	6.7	188
5	89	107	155	26	38	29	37	70	114	134	6.8	144
6	63	92	145	81	45	28	36	755	103	87	6.3	131
7	49	81	149	85	52	30	34	686	100	81	6.2	127
8	41	78	125	73	48	29	32	177	93	75	5.8	121
9	30	75	121	96	40	29	29	104	86	67	5.6	113
10	27	65	117	81	41	28	30	99	83	178	5.7	187
11	23	62	103	66	42	31	28	141	79	132	5.7	124
12	23	63	94	66	42	30	27	5900	74	86	5.7	99
13	22	59	90	62	40	30	23	1540	80	68	5.7	79
14	22	59	89	---	42	29	22	573	5800	58	37	71
15	21	59	365	24	40	31	22	322	---	51	56	72
16	21	59	345	50	38	30	28	229	549	39	53	69
17	22	64	216	58	38	28	20	196	279	32	43	65
18	176	121	121	63	37	26	16	137	254	27	21	61
19	1610	130	102	77	35	26	14	138	177	24	12	57
20	306	---	91	74	36	26	13	137	164	23	6.3	51
21	165	76	86	56	33	23	12	130	143	20	3.8	52
22	136	81	83	57	32	25	12	109	170	17	4.3	106
23	486	116	78	53	33	28	11	412	122	16	8.9	101
24	567	135	74	49	33	31	10	392	127	15	7.9	71
25	177	123	74	47	35	35	9.7	233	188	12	3.4	59
26	125	92	69	45	34	34	10	164	180	12	11	50
27	155	79	71	29	35	32	20	1810	119	12	23	47
28	292	76	67	14	31	31	15	1040	108	11	19	42
29	600	67	67	22	32	32	16	2080	90	10	26	43
30	1690	68	66	29	---	34	1140	1630	80	9.1	19	35
31	355	---	66	40	---	38	---	227	---	8.2	2870	---
MONTH	254	92	119	55	37	30	61	674	341	62	107	188

07303500 ELM FORK NORTH FORK RED RIVER NEAR MANGUM, OKLA.--Continued

DISSOLVED CHLORIDE (CL), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8900	1700	10900	10600	12600	14200	17300	1400	1800	8400	10700	2400
2	7700	3300	9500	10800	11300	12700	15900	1800	2800	9700	10800	260
3	2500	4300	9200	10600	11600	14000	15800	3200	3700	8400	10600	540
4	5700	5400	8900	11300	10700	13400	15700	5400	5400	3800	10300	1100
5	11700	6400	10800	11100	10200	13200	15800	7100	6000	3500	10800	2300
6	11000	7400	8600	10400	11500	11100	15700	6700	6500	4200	10800	3200
7	11100	8200	8400	10100	14000	13400	16200	1200	7000	6200	10400	3900
8	11000	9000	9300	11300	11000	13800	16200	1400	7700	7400	10600	4700
9	12000	9600	9500	12400	11300	14000	14000	2900	8300	7700	9500	5500
10	12200	9500	9700	10500	10800	14100	14100	5700	9100	8700	10000	6100
11	12300	10600	9700	9700	11300	14100	14100	7500	9200	3700	10300	3200
12	12800	10800	9800	9800	11300	14200	14200	940	9500	3600	10200	6700
13	11300	11400	10200	10500	11700	14200	14200	410	9900	4500	10100	7500
14	13000	11500	9900	---	12200	14300	14300	1100	960	7900	9800	7800
15	12300	11700	8300	11200	11300	14700	14700	2100	---	9000	6900	8400
16	12500	11900	2900	11900	11600	14700	14700	2800	730	8600	7400	8900
17	11900	11700	9700	10800	12000	14800	14800	3900	1600	8900	15800	9300
18	8400	12500	5800	10900	12200	14300	14300	4800	2500	9800	14200	9600
19	1800	8100	7600	13500	12000	14800	14800	5500	2700	9700	11300	10200
20	1300	---	8600	11600	13000	15300	15300	6400	3700	12300	11200	9700
21	2600	7800	8600	9800	12400	14900	14900	7000	4400	11300	11300	10300
22	4700	8400	8900	10300	12100	15300	15300	4800	5300	10600	11000	10900
23	2100	9300	9100	10700	12600	15100	15100	6900	4500	10500	11600	9000
24	1600	8300	9400	11100	12300	15100	15100	2200	6100	10000	11700	7500
25	1900	10000	9300	11400	12200	15200	15300	9500	4900	10300	9800	8700
26	2500	8900	9100	11500	11900	15400	13900	8700	6500	10500	10200	8500
27	3100	9300	10300	11500	12400	15800	11700	3600	6200	10600	5300	10200
28	6600	10000	10500	11300	10900	15400	13800	650	6700	10500	10100	10600
29	1300	10600	10400	11300	13900	15800	15500	750	8200	10600	15500	13100
30	590	10900	10200	11000	---	15600	12600	270	7900	10400	14000	9200
31	800	---	10100	12500	---	15600	---	740	---	10600	12700	---
MONTH	7100	8900	9100	11000	11900	14500	14800	3800	5500	8500	10800	7000

DISSOLVED CHLORIDE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	360	400	500	402	374	219	336	1820	327	364	46	5640
2	1120	449	538	410	152	182	309	674	340	391	44	305
3	500	406	743	373	94	219	281	410	372	1060	43	447
4	384	438	747	170	145	207	272	321	456	855	39	303
5	569	431	937	162	220	203	286	306	439	405	41	364
6	386	420	739	477	282	171	280	3170	419	282	38	383
7	299	398	744	489	378	214	271	1180	435	317	36	403
8	252	411	674	457	297	208	258	335	436	338	34	416
9	197	414	664	638	250	208	212	293	424	313	31	415
10	178	357	652	483	251	206	217	371	444	914	32	730
11	149	373	574	367	262	225	206	651	421	404	33	359
12	155	378	530	371	259	223	196	8680	408	264	33	414
13	137	370	523	369	255	219	169	1180	453	231	33	362
14	154	373	506	---	276	217	159	939	8620	279	207	336
15	139	381	1810	151	250	230	167	769	---	269	241	364
16	138	385	960	320	245	223	207	635	669	198	239	361
17	141	412	1210	351	250	212	152	613	576	168	338	351
18	884	809	455	382	247	189	120	475	659	154	153	338
19	3580	635	473	547	229	195	104	507	480	136	76	329
20	550	---	464	469	249	199	104	552	503	150	39	287
21	435	359	439	317	222	177	93	564	478	122	23	306
22	466	408	434	334	209	190	91	378	618	100	26	647
23	1160	627	419	318	225	213	86	1760	410	94	57	532
24	1160	670	405	298	219	232	77	953	497	84	51	325
25	401	704	400	292	234	267	74	1280	658	72	19	305
26	329	482	370	283	219	262	75	843	733	74	66	253
27	448	425	418	186	230	247	126	5550	470	68	84	271
28	1200	433	396	86	192	241	108	1160	453	62	111	253
29	1120	401	391	137	232	247	126	2590	444	60	205	298
30	1740	412	384	178	---	265	7700	873	384	54	139	186
31	463	---	382	270	---	294	---	280	---	49	19480	---
MONTH	619	454	609	336	240	219	429	1290	760	269	711	543

07303500 ELM FORK NORTH FORK RED RIVER NEAR MANGUM, OKLA.--Continued

DISSOLVED SOLIDS, IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18620	4520	22300	21850	25450	28450	---	3880	4650	17800	22000	5990
2	16370	8040	19750	22220	23050	25600	31450	4780	6990	20050	22070	1160
3	6390	10220	19150	21850	23650	27920	31220	7970	9090	17650	21700	1810
4	12770	12240	18700	22970	22000	26950	31150	12240	12320	9320	21170	3050
5	23800	14040	22220	22750	21020	26570	31370	15320	13370	8570	22220	5900
6	22520	15920	18020	21400	23350	22750	31150	14640	14190	9990	22220	7970
7	22670	17350	17650	20800	26000	26950	---	3280	15170	13670	21400	9540
8	22450	18770	19300	23050	22520	27550	---	3740	16450	15840	21850	10890
9	24320	19900	19670	25150	23050	28000	28000	7290	17500	16520	19750	12390
10	24770	19670	20050	21620	22150	28220	28220	12840	19070	18250	20720	13590
11	24850	21850	20050	20120	23050	28220	28220	16150	19150	8940	21170	7820
12	25750	22070	20350	20350	23050	28450	28450	2740	19670	8870	20950	14570
13	22970	23270	21020	21620	23720	28370	28370	1510	20420	10590	20870	16000
14	26120	23420	20420	---	24620	28600	28600	3100	2770	16900	20350	16600
15	24850	23870	17500	22820	23050	29270	29270	5330	647	18920	14940	17800
16	25220	24100	7140	24100	23650	29350	29350	7060	2240	18170	15940	18700
17	24170	23870	20200	22220	24400	29500	29500	9390	4220	18620	31370	19370
18	17720	25220	12990	22300	24700	28600	28600	11040	6230	20350	28300	19970
19	4740	17200	16300	27100	24250	29420	29420	12470	6740	20120	22970	20950
20	3490	---	18100	23570	26200	30470	30470	14040	8940	24920	22820	20050
21	6430	16670	18020	20270	25150	29650	29650	15090	10440	23120	23050	21250
22	10890	17720	18700	21250	24550	30320	30320	11190	12090	21770	22520	22300
23	5370	19370	19070	22000	25520	30100	30100	14940	10520	21620	23950	18770
24	4170	17500	19520	22600	24850	30020	30020	5500	13590	20720	23800	16150
25	4880	20720	19300	23200	24700	30250	30320	19670	11270	21170	20350	18250
26	6390	18700	19070	23420	24170	30620	27850	18250	14190	21620	20950	17950
27	7740	19300	21250	23420	25000	31300	23800	8870	13740	21700	12020	21100
28	14340	20720	21550	23120	22370	30550	27700	2060	14640	21620	20800	21850
29	3650	21770	21320	22970	27770	31220	30770	2240	17420	21770	30700	26420
30	1910	22300	20950	22450	---	30850	25370	1190	16820	21470	27920	19150
31	2400	---	20870	25300	---	30850	---	2270	---	21850	25670	---
MONTH	14930	18630	19050	22590	24100	28870	29210	8710	11820	17820	22140	14910

DISSOLVED SOLIDS (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	754	1050	1020	826	756	438	---	4890	854	769	95	14290
2	2390	1110	1120	840	311	366	611	1750	849	812	89	1380
3	1260	966	1550	767	192	437	556	1010	908	2240	88	1500
4	862	992	1560	347	297	415	538	727	1030	2090	80	855
5	1160	948	1920	332	454	409	568	662	975	995	84	923
6	791	903	1560	982	574	350	555	6920	920	675	78	947
7	612	843	1570	1010	756	429	---	3270	942	701	75	979
8	515	862	1410	933	608	417	---	908	932	727	71	971
9	401	860	1380	1290	510	416	423	728	898	669	64	937
10	361	744	1350	992	514	412	434	832	927	1920	67	1610
11	302	767	1190	761	535	450	412	1390	879	990	69	886
12	313	775	1100	769	529	446	392	25180	850	646	68	905
13	279	754	1080	759	519	437	337	4360	937	543	68	777
14	310	759	1050	---	558	432	317	2640	24940	593	428	717
15	282	773	3830	308	510	458	332	1970	3670	562	525	769
16	279	781	2390	651	498	444	412	1580	2060	417	513	757
17	287	838	2510	720	507	422	303	1500	1530	352	669	732
18	1870	1630	1020	783	500	378	239	1100	1660	319	306	701
19	9320	1350	1010	1100	465	389	207	1140	1200	283	155	679
20	1510	---	977	955	502	395	206	1210	1230	303	80	595
21	1090	765	924	657	448	352	184	1220	1130	250	48	631
22	1090	861	909	688	424	377	180	876	1400	206	54	1320
23	2980	1310	875	653	455	423	171	3830	966	193	116	1110
24	3080	1420	843	610	443	462	154	2440	1100	173	103	697
25	1040	1450	834	595	473	531	147	2660	1520	149	40	640
26	828	1010	772	575	444	521	150	1770	1610	152	136	533
27	1110	886	860	379	466	490	257	13600	1040	141	191	558
28	2630	895	814	175	393	478	217	3670	989	128	230	519
29	3040	823	806	279	465	489	249	7930	941	123	406	599
30	5690	843	792	364	---	525	15550	3860	817	110	279	388
31	1390	---	789	546	---	583	---	859	---	100	39300	---
MONTH	1540	964	1280	688	486	438	893	3440	1990	591	1440	1300

07304500 ELK CREEK NEAR HOBART, OKLA.

LOCATION.--Lat 34°54'51", long 99°06'49", in NE1/4NE1/4 sec. 17, T.5 N., R.18 W., Kiowa County, at county road bridge, 11.0 mi (17.7 km) downstream from Little Elk Creek, 11.7 mi (18.8 km) south of Hobart, and 1.2 mi (1.9 km) west of Hobart.

DRAINAGE AREA.--549 sq mi (1,421.9 km^2).

PERIOD OF RECORD.--Chemical analyses: October 1949 to September 1951, water years 1957-58 (partial-record station), October 1958 to September 1963, November 1969 to current year.
Water temperatures: October 1949 to September 1951, October 1958 to September 1961, November 1969 to current year.
Sediment records: December 1958 to September 1961.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
OCT.							
01-03	.65	50.6	210	75	1.9	710	9.0
04-05	.31	21.1	160	26	.7	373	9.3
06-14	.61	7.15	220	80	1.6	664	9.0
15-20	.92	36.6	340	180	2.0	984	9.0
21-25	.37	21.5	160	32	.8	414	8.5
26-27	.51	36.4	200	51	1.2	566	8.1
28-29	.28	387	130	36	.5	330	8.3
30-31	.18	701	86	9	.4	209	8.9
NOV.							
01-02	.28	54.0	92	42	1.0	311	9.4
03-05	.64	41.8	270	100	1.1	674	8.4
06-11	1.04	35.0	430	170	1.3	1040	8.3
12-20	1.46	34.7	640	270	1.7	1470	8.5
21-30	1.43	39.7	620	250	1.7	1450	8.3
DEC.							
01-14	1.46	63.6	620	250	1.9	1440	8.3
15...	.30	204	150	76	.7	327	9.5
16-18	.48	91.3	200	91	1.2	548	9.1
19-21	.81	44.8	350	130	1.4	862	8.0
22-31	1.16	50.5	520	210	1.8	1210	8.9
JAN.							
01-06	1.17	46.3	520	240	1.9	1200	8.7
07-08	.97	36.6	440	150	1.6	1040	8.7
09-20	1.32	52.4	590	220	1.8	1360	8.6
21-31	1.33	52.9	640	270	1.7	1380	8.8
FEB.							
01-10	1.43	59.5	630	270	1.9	1480	8.2
11-14	1.26	94.8	560	200	1.7	1280	8.8
15-24	.58	44.0	290	47	1.1	686	8.7
25-29	1.09	34.5	490	200	1.7	1180	8.6
MAR.							
01-10	1.13	38.1	520	170	1.5	1220	8.7
11-20	1.26	30.1	570	210	1.8	1350	8.6
21-31	1.43	23.0	620	280	2.3	1560	8.2
APR.							
01-10	1.69	23.8	700	320	2.6	1800	8.5
11-20	1.86	27.4	780	400	2.5	1920	8.1
21-26	2.03	338	850	440	2.7	2060	8.0
27...	.32	75.2	160	40	.6	408	7.6
28,..	.19	3.86	98	13	.4	242	7.7
29-30	.47	14.1	210	85	1.1	575	9.0
MAY							
01...	.45	29.3	160	61	1.7	541	9.3
02-03	1.31	41.5	630	390	1.5	1400	8.6
04-12	1.11	59.3	490	230	1.6	1200	7.8
13-15	.30	185	160	45	.6	361	7.4
16-21	.37	45.1	190	41	.9	439	9.4
22-29	.55	25.1	260	70	1.1	638	8.0
30-31	.75	65.8	350	140	1.3	840	7.8
JUNE							
01-10	.57	18.2	270	60	1.1	682	8.1
11-13	.80	10.2	370	98	1.4	910	8.1
14...	.61	347	260	73	1.2	700	7.1
15-16	.26	447	160	50	.3	322	7.4
17-23	.39	62.6	190	46	.7	458	8.1
24-30	.62	33.0	290	90	1.1	712	8.0
JULY							
01-04	.64	31.7	310	89	1.2	756	8.0
05...	.38	16.6	180	47	.8	458	7.5
06-10	.67	39.7	320	100	1.2	774	7.8
11-12	.32	26.6	150	38	.7	376	7.6
13...	.20	9.72	100	16	.5	244	7.1
14-15	.51	13.1	220	84	1.1	597	7.8
16-20	.70	8.47	310	130	1.2	790	7.9
21-31	1.10	6.53	460	190	1.9	1210	7.9
AUG.							
01-10	1.25	5.97	500	220	2.5	1390	8.5
11-20	1.47	4.67	570	310	2.7	1600	8.0
21-26	1.44	2.38	540	330	2.6	1540	8.4
27-29	.89	3.17	330	170	2.3	1020	8.0
30-31	1.18	4.69	460	240	2.4	1350	8.5
SEP.							
01-02	1.66	4.61	640	430	2.4	1700	8.1
03-08	2.07	8.62	820	610	2.4	2000	8.2
09-10	1.48	4.12	570	330	2.6	1550	8.3
11-20	1.05	1.21	400	170	2.4	1190	8.2
21-30	1.05	.69	380	140	2.7	1190	8.1

07304500 ELK CREEK NEAR HOBART, OKLA.

EXTREMES, Current year.--Dissolved solids: Maximum, 1,520 mg/1 Sept. 3-8; minimum 136 mg/1 Oct. 30-31.
Hardness: Maximum 850 mg/1 Apr. 21-26; minimum, 86 mg/1 Oct. 30-31.
Specific conductance: Maximum daily 2,160 micromhos Sept. 7; minimum daily 155 micromhos Oct. 30.
Water temperatures: Maximum, 27.0°C June 27-29; minimum, freezing point Jan. 5, 15-17.

Period of record.--Dissolved solids: Maximum, 2,620 mg/1 Nov. 26-30, 1958; minimum, 94 mg/1 Sept. 5, 1971.
Hardness: Maximum,1,640 mg/1 Nov. 26-30, 1958; minimum, 84 mg/1 June 12-13, 1962.
Specific conductance: Maximum daily, 3,100 micromhos Nov. 27, 1958; minimum daily, 154 micromhos May 26, 1959.
Water temperatures: Maximum, 35.0°C July 8, 1951; minimum, freezing point on many days during winter period.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-CHARGE (CFS)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
OCT.								
01-03	39	63	136	14	120	71	.40	481
04-05	34	19	110	26	43	16	1.3	230
06-14	5.9	56	138	16	120	59	.10	449
15-20	20	85	146	22	220	92	.10	677
21-25	29	23	148	4	54	21	4.0	274
26-27	36	38	182	0	80	36	4.6	375
28-29	692	12	114	0	42	14	4.8	207
30-31	1910	8.1	82	6	16	7.5	1.0	136
NOV.								
01-02	98	22	36	12	65	20	.20	204
03-05	33	40	202	2	130	37	3.2	469
06-11	17	60	318	0	220	65	4.0	762
12-20	12	100	424	16	320	100	3.5	1070
21-30	14	100	454	0	300	100	3.9	1050
DEC.								
01-14	22	110	448	0	300	110	1.6	1070
15...	349	21	50	20	81	28	.70	217
16-18	95	40	84	24	100	50	.90	356
19-21	28	61	268	0	150	68	5.3	593
22-31	22	93	318	32	240	92	2.9	850
JAN.								
01-06	20	98	308	18	270	97	3.6	857
07-08	19	76	312	20	190	73	5.0	714
09-20	20	100	422	12	280	99	4.9	971
21-31	20	100	400	28	300	100	1.8	980
FEB.								
01-10	21	110	444	0	340	110	9.4	1050
11-14	38	92	362	36	270	95	8.9	924
15-24	38	42	268	14	65	42	5.8	429
25-29	16	84	322	18	250	86	3.7	798
MAR.								
01-10	17	78	376	26	220	88	8.6	829
11-20	12	100	398	18	260	100	4.0	930
21-31	8.1	130	412	0	340	130	2.3	1050
APR.								
01-10	7.1	160	436	12	400	170	.60	1240
11-20	7.4	160	466	0	440	170	1.2	1370
21-26	84	180	496	0	510	180	4.8	1490
27...	118	18	146	0	46	23	6.2	236
28...	10	9.6	104	0	20	12	.20	143
29-30	15	37	124	14	98	51	.40	348
MAY								
01...	33	50	64	28	92	56	.40	329
02-03	16	89	256	16	440	96	1.2	961
04-12	27	83	322	0	280	88	4.8	814
13-15	310	18	140	0	58	15	3.2	221
16-21	61	30	84	48	68	27	.30	274
22-29	23	41	232	0	100	39	5.6	404
30-31	44	55	252	0	180	53	4.8	554
JUNE								
01-10	16	43	256	0	100	40	2.3	422
11-13	6.4	62	332	0	150	61	1.3	590
14...	284	45	228	0	110	47	3.7	452
15-16	853	10	134	0	50	10	3.9	194
17-23	80	23	176	0	60	22	4.3	290
24-30	27	42	244	0	120	41	3.4	453
JULY								
01-04	25	47	270	0	120	46	1.8	469
05...	22	26	162	0	62	25	5.0	280
06-10	30	48	268	0	120	49	2.8	490
11-12	42	19	136	0	55	22	4.4	235
13...	25	11	102	0	26	8.7	2.3	144
14-15	13	36	166	0	94	47	3.5	374
16-20	6.1	50	216	0	160	52	3.2	514
21-31	3.0	94	332	0	240	100	2.3	806
AUG.								
01-10	2.4	130	328	8	280	130	1.2	922
11-20	1.6	150	320	0	360	160	1.8	1080
21-26	.83	140	248	2	390	150	1.4	1060
27-29	1.8	97	198	0	220	97	1.1	653
30-31	2.0	120	248	8	290	140	1.1	868
SEP.								
01-02	1.4	140	260	0	480	160	.80	1220
03-08	2.1	160	260	0	660	180	1.1	1520
09-10	1.4	140	292	0	400	150	1.2	1090
11-20	.58	110	286	0	240	110	1.0	775
21-30	.33	120	296	0	230	170	1.0	771

07304500 ELK CREEK NEAR HOBART, OKLA.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.0	14.0	6.0	7.0	3.0	11.0	10.0	17.5	19.0	26.0	24.0	24.0
2	21.5	13.0	5.0	5.0	2.0	7.0	11.5	17.0	21.0	25.5	24.0	21.0
3	20.5	12.0	3.5	5.0	0.5	6.5	11.0	17.0	22.0	25.0	23.5	22.0
4	18.0	10.5	4.5	0.5	0.5	7.5	10.5	18.0	23.0	24.0	24.5	21.0
5	18.0	12.0	4.5	0.0	1.0	6.0	12.0	18.5	22.0	21.0	24.0	21.0
6	17.5	10.5	5.0	0.5	4.0	6.5	16.0	19.0	23.0	21.0	24.5	22.0
7	18.0	9.0	5.5	1.0	1.0	11.0	17.0	17.0	24.0	22.0	24.5	24.0
8	19.0	9.5	5.5	2.5	1.5	9.0	15.5	16.5	24.0	23.0	24.0	24.0
9	16.0	9.5	5.0	4.0	3.0	9.0	15.0	18.0	23.5	24.0	24.0	23.5
10	14.0	9.0	5.0	4.5	4.5	10.0	16.0	19.0	23.5	24.0	23.5	25.0
11	15.0	10.0	5.0	4.0	2.0	13.5	20.0	18.5	24.0	23.0	24.0	24.5
12	16.5	10.5	5.0	4.5	2.0	16.0	20.0	17.0	24.0	23.5	24.5	24.5
13	17.0	12.0	5.0	4.0	3.0	14.5	21.0	15.5	24.0	22.0	24.0	25.0
14	16.5	13.5	8.0	1.5	5.0	14.0	20.0	15.5	22.0	25.0	24.5	24.5
15	17.5	15.0	7.0	0.0	4.5	15.0	16.5	17.0	22.0	25.5	24.5	22.5
16	19.0	16.5	5.5	0.0	5.0	13.0	16.0	18.0	23.0	25.5	24.0	24.0
17	20.0	16.5	5.0	0.0	5.5	13.5	17.0	19.0	23.0	25.0	24.5	24.5
18	20.0	13.0	5.0	3.5	6.0	14.0	17.0	20.0	24.0	25.0	25.0	24.5
19	17.5	10.0	6.0	4.5	6.0	14.0	20.0	21.0	24.0	24.5	25.0	24.5
20	16.5	9.0	5.0	4.5	6.5	15.0	20.0	20.0	25.0	25.0	25.0	24.0
21	15.5	9.5	5.5	4.0	8.0	15.0	16.0	21.5	23.0	25.0	25.0	20.5
22	15.0	9.5	5.0	3.5	7.5	14.5	15.5	22.0	23.5	24.0	24.5	17.5
23	14.5	8.0	7.0	5.0	6.0	14.5	17.0	22.0	25.0	25.0	24.0	18.5
24	14.5	8.0	8.0	6.0	8.0	14.5	15.0	22.0	25.0	26.0	24.0	19.0
25	15.0	7.5	8.5	4.5	8.0	11.5	17.0	22.0	26.0	25.0	23.0	20.5
26	17.0	8.0	10.0	4.0	8.0	14.0	15.0	22.0	26.0	25.0	22.0	22.0
27	14.5	7.0	11.0	3.0	7.0	14.5	11.0	22.5	27.0	25.5	22.0	18.5
28	14.5	9.0	7.0	0.5	9.0	13.5	13.5	22.5	27.0	25.5	22.5	21.5
29	15.0	7.5	8.0	0.5	11.0	9.0	17.0	22.0	27.0	25.5	22.0	20.0
30	13.0	6.5	7.0	1.0	---	9.5	17.0	20.0	26.0	24.0	23.0	15.0
31	12.5	---	6.0	1.0	---	8.0	---	21.0	---	23.5	24.0	---
MONTH	17.0	10.5	6.0	3.0	5.0	11.0	16.0	19.5	24.0	24.5	24.0	22.0

07304500 ELK CREEK NEAR HOBART, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	844	377	1450	1390	1450	1460	1740	541	713	778	1340	1630
2	916	459	1480	1380	1510	1490	1780	1530	556	780	1340	1740
3	926	607	1430	1350	1550	1380	1830	1370	512	768	1350	1850
4	338	674	1480	1390	1570	1140	1870	939	616	698	1370	1900
5	433	783	1500	1440	1500	1130	1900	1120	804	458	1380	2040
6	766	910	1460	1240	1500	1140	1930	1230	715	654	1410	2150
7	634	1060	1410	989	1450	1180	1980	1340	658	769	1430	2160
8	634	1220	1480	1150	1490	1190	2010	1280	690	821	1440	1880
9	726	942	1520	1410	1510	1200	1820	1110	748	810	1430	1630
10	802	1020	1540	1440	1470	1240	1870	1380	789	832	1440	1470
11	854	1260	1500	1410	1420	1260	1990	1450	861	406	1440	1360
12	895	1400	1490	1380	1380	1300	2060	1240	926	341	1540	1280
13	907	1460	1400	1380	1360	1300	2120	337	951	244	1430	1240
14	972	1550	1460	1360	1220	1320	2050	340	682	564	1500	1200
15	1040	1550	327	1400	687	1350	1570	411	283	625	1590	1180
16	1100	1550	622	1440	631	1450	1860	454	355	726	1640	1160
17	1140	1530	592	1420	638	1450	1900	509	428	751	1660	1150
18	1140	1520	692	1340	643	1460	1940	458	432	820	1670	1150
19	1190	1490	801	1430	648	1440	2020	468	429	839	1680	1150
20	1410	1470	859	1450	671	1440	2020	494	440	877	1690	1160
21	434	1470	977	1500	693	1460	2010	541	463	986	1700	1150
22	484	1470	1170	1400	758	1460	2080	582	492	1060	1640	1160
23	324	1440	1220	1430	836	1510	2120	615	538	1110	1660	1180
24	398	1450	1310	1420	942	1540	2110	667	611	1130	1680	1190
25	451	1440	1330	1400	1080	1540	2080	702	657	1160	1490	1190
26	543	1630	1360	1390	1180	1550	2070	657	701	1190	1160	1200
27	591	1440	1360	1430	1250	1560	408	605	725	1230	943	1200
28	372	1420	1330	1450	1330	1610	242	652	749	1260	1200	1200
29	292	1380	1380	1440	1450	1650	602	695	760	1290	906	1220
30	155	1370	1360	1440	---	1680	593	794	766	1300	1240	1230
31	266	---	1240	1500	---	1720	---	906	---	1320	1460	---
MONTH	709	1240	1240	1390	1170	1410	1750	820	635	858	1450	1410

07305000 NORTH FORK RED RIVER NEAR HEADRICK, OKLA.

LOCATION.--Lat 34°38'04", long 99°05'47", in NW1/4NE1/4 sec.21, T.2 N., R.18 W., Tillman County, at gaging station at bridge on U.S. Highway 62, 2.5 mi (4.0 km) east of Headrick, 12.9 mi (20.8 km) upstream from Otter Creek, and at mile 33.0 (53.1 km).

DRAINAGE AREA.--4,244 sq mi (10,992 km²), of which 399 sq mi (1,033.4 km²) is probably noncontributing.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
OCT.								
05...	240	1500	172	0	550	2400	.90	4.0
15...	37	1900	210	0	820	3000	.25	1.1
25...	144	1100	154	0	680	1700	.50	2.2
NOV.								
05...	206	710	168	0	480	1100	.45	2.0
15...	64	1900	224	0	820	3100	.29	1.3
25...	56	2300	248	0	900	3600	.29	1.3
DEC.								
05...	60	2400	242	0	880	3800	.14	.60
15...	300	1400	164	0	510	2200	.68	3.0
25...	57	1500	216	0	690	2400	.77	3.4
JAN.								
05...	20	1800	306	0	750	2800	2.1	9.5
15...	37	2800	228	0	1000	4400	.20	.90
25...	35	2600	132	0	950	4300	.59	2.6
FEB.								
04...	29	2400	294	0	1000	3900	.43	1.9
15...	75	1600	318	4	700	2600	1.2	5.2
25...	25	2100	230	0	790	3400	.20	.90
MAR.								
15...	18	2300	262	0	880	3600	.25	1.1
25...	19	2500	252	0	920	4000	.20	.90
APR.								
05...	13	3400	240	0	1200	5300	--	--
15...	23	2600	202	0	990	4200	.20	.90
25...	11	2600	218	0	1000	4100	.20	.90
MAY								
05...	70	1000	150	0	1000	1600	.99	4.4
15...	894	200	110	0	540	300	1.1	4.9
25...	42	1500	154	0	810	2500	.16	.70
JUNE								
05...	90	970	132	0	900	1600	.23	1.0
15...	196	1600	166	0	760	2600	.81	3.6
25...	90	1200	144	0	800	1900	.29	1.3
JULY								
05...	64	1400	200	0	710	2300	.20	.90
15...	45	1400	144	0	660	2300	.25	1.1
25...	15	2300	156	0	1100	3800	.09	.40
AUG.								
05...	9.6	2300	140	0	1100	3700	.14	.60
15...	8.0	2100	130	0	1000	3400	.14	.60
25...	10	2000	98	0	1000	3200	.25	1.1
SEP.								
05...	320	510	84	0	870	850	.56	2.5
15...	40	1800	128	0	990	2900	.32	1.4
25...	9.1	2600	132	0	1200	4200	.23	1.0

07305000 NORTH FORK RED RIVER NEAR HEADRICK, OKLA.

PERIOD OF RECORD.--Chemical analyses: Water years 1957-59 (partial-record station), October 1959 to September 1963, July 1968 to current year.
Water temperatures: November 1959 to September 1963, July 1968 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.								
05...	5400	7.34	3500	950	810	21	8280	7.6
15...	6840	9.30	683	1300	1100	23	10300	7.8
25...	4350	5.92	1690	960	830	15	6490	7.5
NOV.								
05...	2740	3.73	1520	680	540	12	4320	8.3
15...	6730	9.15	1160	1200	1000	24	10100	8.2
25...	7850	10.7	1190	1400	1200	27	11700	8.2
DEC.								
05...	8070	11.0	1310	1300	1100	29	11900	8.0
15...	4830	6.57	3910	760	630	22	7350	7.3
25...	5240	7.13	806	1000	820	21	8030	8.3
JAN.								
05...	6340	8.62	342	1200	950	23	9440	8.3
15...	9030	12.3	902	1500	1300	31	13500	8.2
25...	8880	12.1	839	1400	1300	30	13200	8.0
FEB.								
04...	8600	11.7	673	1500	1300	27	12700	8.2
15...	5630	7.66	1140	1100	830	21	8600	8.4
25...	7210	9.81	887	1300	1100	25	11100	8.3
MAR.								
15...	7580	10.3	368	1300	1100	28	11800	8.0
25...	8500	11.6	436	1400	1200	29	12400	7.9
APR.								
05...	10600	14.4	372	1800	1600	35	16400	8.0
15...	8700	11.8	540	1500	1300	29	13500	7.7
25...	8620	11.7	256	1500	1300	29	13300	7.9
MAY								
05...	4520	6.15	854	1200	1100	13	6550	7.8
15...	1400	1.90	3380	620	530	3.5	2030	8.0
25...	5830	7.93	661	1200	1100	19	8600	7.8
JUNE								
05...	4230	5.75	1030	1200	1100	12	6190	7.9
15...	5950	8.09	3150	1200	1100	20	8940	7.8
25...	4770	6.49	1160	1100	980	16	7110	7.7
JULY								
05...	5000	6.80	864	1100	940	18	8060	7.6
15...	5070	6.90	616	1000	880	19	8010	7.7
25...	8240	11.2	334	1600	1500	25	12300	7.8
AUG.								
05...	7980	10.9	12.9	1500	1400	26	12200	7.6
15...	7160	9.74	155	1400	1300	24	11200	7.6
25...	7100	9.66	192	1300	1200	24	11000	7.1
SEP.								
05...	2920	3.97	2520	1100	1000	6.7	4220	7.2
15...	6600	8.98	713	1300	1200	22	9860	7.6
25...	9200	12.5	226	1800	1700	27	13600	7.7

07305000 NORTH FORK RED RIVER NEAR HEADRICK, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6110	1910	12800	11400	13000	12300	13900	4420	2330	10400	11500	10800
2	6060	1870	10900	11900	13300	11100	13600	4290	2440	9750	14400	8980
3	8210	2440	12400	10800	13200	9140	15800	8750	4240	9490	12700	5180
4	6440	3380	11400	10600	13200	10200	16900	6320	4520	11400	12400	3200
5	8060	4350	12100	9350	12200	13900	19100	6280	6740	8060	12200	4300
6	4500	5090	12100	9500	12000	---	13500	6990	7500	11000	12000	5150
7	5480	5930	11500	11000	13600	---	17100	7080	7450	9950	11400	6410
8	8190	6540	13300	11700	13100	---	16000	12700	8280	15100	11500	5500
9	8330	7100	12400	10200	15400	12300	17400	10900	8780	10400	9690	8320
10	7450	6600	13500	12000	13400	11700	17100	5710	9620	9290	10100	9540
11	8370	8190	12700	11400	13200	11900	17300	6630	10100	8270	11000	11900
12	8470	8560	12800	11500	13000	13300	14800	5060	10500	5700	11000	11600
13	5440	9030	13100	13700	13500	11600	15500	4950	11000	6430	11100	13100
14	11700	10000	12400	13900	11200	12800	15600	1860	6960	9020	11000	13070
15	8960	10300	4120	14300	8600	12700	14800	2020	6670	7940	11100	8920
16	9180	9970	1920	10900	5980	13800	14800	3200	1490	8590	11300	9570
17	9840	10400	3270	17900	5900	14000	16700	4200	1420	9230	11300	10200
18	9480	9000	7300	12000	6850	13600	15200	4690	2030	9780	11500	12400
19	9540	8320	5910	11400	6150	13300	13100	5680	2780	9940	11600	12900
20	10000	9230	5540	12100	6420	13400	14200	5320	3650	11800	11600	12100
21	10700	10500	6600	11800	7930	13500	15400	6210	4540	11600	11600	13100
22	3340	12300	7500	11400	7490	13500	16700	7540	5550	11300	11200	13200
23	3760	13700	8540	12400	6870	14000	14000	7470	5300	11900	11400	13800
24	4420	14400	7950	13000	10500	13500	13300	8070	8080	12100	12200	13400
25	11700	11600	8180	13400	11300	13300	13600	8680	7640	12300	11000	16500
26	6910	15700	10400	13300	11600	13600	5290	8420	7830	12400	10400	15600
27	5470	9530	11100	12300	10600	18900	5060	4440	8020	12400	10800	18200
28	5750	12700	11200	12900	11900	14900	632	6490	9740	12600	11400	16000
29	4400	12500	11500	10300	13600	13400	1890	7370	9920	12400	11800	14900
30	1580	12800	11600	11800	---	12400	2710	5400	8820	12300	11900	14200
31	709	---	10600	11300	---	14600	---	3290	---	12200	11500	---
MONTH	7080	8800	9890	11980	10860	13090	13370	6140	6470	10490	11470	11070

TEMPERATURE (°C) OF WATER, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	15.5	5.5	---	4.0	12.0	17.0	---	25.5	29.0	29.0	26.0
2	---	15.0	3.0	---	3.5	11.5	17.5	---	26.5	---	---	23.5
3	---	13.5	4.5	---	6.0	12.0	17.0	---	27.5	27.5	---	22.0
4	---	13.5	4.0	---	7.0	15.5	16.5	---	28.5	24.5	---	22.0
5	---	14.0	4.0	---	7.0	15.5	20.5	---	27.5	---	---	24.0
6	---	10.5	4.0	---	5.5	---	22.5	23.5	29.0	---	---	25.0
7	---	9.0	5.0	---	8.0	---	23.0	22.0	---	27.0	---	27.0
8	---	10.5	5.5	---	9.0	---	21.0	23.5	---	28.0	---	27.5
9	---	12.0	4.5	---	7.0	17.5	19.5	---	27.0	28.5	---	27.0
10	---	---	6.0	---	3.5	18.0	24.5	23.5	28.0	30.0	---	27.5
11	---	---	7.0	---	---	20.0	26.0	---	---	---	---	27.5
12	---	---	7.0	---	---	20.5	26.5	22.0	---	---	---	27.0
13	---	---	6.5	4.5	---	19.5	25.5	---	---	29.0	---	27.0
14	20.0	---	9.5	4.0	---	20.0	25.0	---	28.0	---	---	26.5
15	21.0	---	9.5	3.0	---	18.5	21.5	---	26.5	---	---	27.0
16	23.0	---	9.5	3.5	---	18.0	22.0	---	27.0	---	---	27.0
17	23.0	---	9.5	6.0	14.0	20.0	22.5	---	28.0	---	---	27.0
18	22.0	11.0	9.0	11.5	12.0	19.5	24.0	28.0	28.0	---	---	27.0
19	19.5	9.0	10.5	11.5	11.0	19.0	26.0	26.5	29.0	---	---	26.5
20	17.5	9.5	10.5	11.0	13.5	20.5	22.0	---	29.5	---	---	---
21	17.5	10.5	10.5	10.5	16.0	20.0	20.5	---	27.5	---	---	---
22	18.5	8.5	---	12.0	10.0	20.5	21.5	26.5	29.0	---	---	---
23	18.5	8.0	---	11.0	13.5	20.0	20.5	---	---	---	29.5	---
24	17.5	8.0	---	9.0	14.5	17.0	---	28.5	29.5	---	26.5	---
25	17.0	7.5	---	8.5	14.5	17.5	---	27.5	32.0	---	25.0	---
26	18.0	9.5	---	3.0	12.0	20.0	---	27.0	31.5	---	26.0	---
27	16.5	10.0	---	3.0	13.5	19.5	---	26.5	---	---	27.0	---
28	17.5	10.0	---	3.0	16.0	15.5	---	27.5	31.5	28.0	26.0	---
29	17.5	9.0	---	5.5	18.0	14.5	---	25.5	---	29.0	26.5	---
30	14.0	7.0	---	6.0	---	13.5	---	25.0	---	---	26.0	---
31	13.0	---	---	6.5	---	14.5	---	24.5	---	---	27.5	---
MONTH	---	---	---	---	10.5	17.5	---	---	---	---	---	---

07305000 NORTH FORK RED RIVER NEAR HEADRICK, OKLA.--Continued

DISSOLVED SULFATE (SO_4), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	640	200	960	890	1000	950	1100	460	240	820	900	850
2	630	190	850	920	1000	870	1000	450	250	780	1100	940
3	860	250	960	850	1000	740	1200	910	440	760	980	540
4	670	350	890	830	1000	810	1300	660	470	890	960	330
5	930	450	940	750	940	1100	1400	650	700	840	940	450
6	470	530	940	760	930	---	1000	730	780	860	930	540
7	570	620	900	860	1000	---	1300	740	780	790	890	670
8	650	680	1000	910	1000	---	1200	980	860	1100	900	570
9	870	740	960	810	1200	950	1300	850	910	820	770	870
10	780	690	1000	930	1000	910	1300	590	770	750	800	760
11	870	850	980	890	1000	920	1300	690	800	860	860	920
12	880	890	980	900	1000	1000	1100	530	830	590	860	900
13	570	730	1000	1000	1000	900	1200	520	860	670	870	1000
14	910	790	960	1100	880	980	1200	190	720	730	860	1000
15	930	810	430	1100	900	980	1100	210	700	830	870	930
16	740	790	200	850	620	1100	1100	330	160	890	880	760
17	780	820	340	1300	610	1100	1300	440	150	740	880	810
18	760	940	760	930	710	1000	1100	490	210	780	900	960
19	760	870	620	890	640	1000	1000	590	290	790	900	990
20	790	740	580	940	670	1000	1100	550	380	920	900	940
21	840	830	690	920	830	1000	1200	650	470	900	900	1000
22	350	950	760	890	780	1000	1300	790	580	880	880	1000
23	390	1000	890	960	720	1100	1100	780	550	920	890	1100
24	460	1100	830	1000	830	1000	1000	840	840	940	940	1000
25	910	900	850	1000	880	1000	1000	900	800	950	860	1200
26	720	1200	820	1000	900	1000	550	880	820	960	820	1200
27	570	760	870	950	830	1400	530	460	840	960	850	1400
28	600	980	880	990	920	1100	66	680	780	970	890	1200
29	460	960	900	810	1000	1000	240	770	790	960	920	1100
30	160	980	900	920	---	960	280	560	920	950	920	1100
31	74	---	830	880	---	1100	---	340	---	940	900	---
MONTH	670	750	820	930	890	1000	1000	620	620	860	890	900

DISSOLVED SULFATE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	254	734	114	113	73	56	46	106	487	113	27	4.1
2	206	289	118	115	63	56	42	263	194	96	32	1160
3	228	240	147	105	52	52	45	999	184	92	25	569
4	328	243	137	72	57	54	44	318	132	146	22	401
5	549	258	152	73	71	69	50	168	171	145	24	351
6	147	265	167	102	68	---	36	128	188	260	21	193
7	131	242	172	151	62	---	45	133	161	194	18	142
8	161	244	198	133	60	---	42	364	158	197	20	96
9	140	232	189	100	72	59	46	655	153	109	48	124
10	111	176	206	115	61	54	72	205	112	84	28	101
11	115	196	179	113	60	55	59	140	99	235	20	120
12	107	185	173	114	65	58	42	242	96	312	15	114
13	64	141	160	130	81	51	41	3720	91	226	14	179
14	96	143	165	86	80	53	38	1430	178	163	14	133
15	93	141	768	82	164	47	64	476	6620	100	19	100
16	70	130	395	85	143	54	61	334	2180	72	13	66
17	72	137	285	219	143	55	54	290	524	42	8.1	57
18	82	134	412	118	154	50	40	237	334	65	6.0	52
19	82	117	193	101	126	52	35	209	292	70	5.1	43
20	107	98	139	104	125	50	44	151	294	64	7.3	30
21	1210	127	143	106	132	50	44	143	263	54	6.8	33
22	261	169	156	103	97	47	41	140	251	48	10	30
23	237	181	161	106	68	52	35	118	189	45	8.2	28
24	159	171	141	102	65	56	30	107	243	43	5.9	26
25	565	136	131	97	62	52	31	178	193	38	19	30
26	595	188	120	91	56	50	19	315	167	36	16	32
27	254	125	124	82	52	64	2190	94	167	31	17	40
28	268	142	116	70	57	49	125	99	170	29	9.8	36
29	326	122	118	53	64	44	80	1790	140	31	4.9	37
30	2440	117	132	64	---	41	69	817	149	31	2.7	35
31	871	---	110	67	---	48	---	1780	---	31	6.3	---
MONTH	333	194	191	102	84	53	120	521	486	103	16	145

07305000 NORTH FORK RED RIVER NEAR HEADRICK, OKLA.--Continued

DISSOLVED CHLORIDE (CL), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1700	460	4000	3500	4000	3800	4400	1200	580	3100	3500	3300
2	1600	450	3300	3700	4200	3400	4300	1100	610	2900	4500	2700
3	2400	610	3800	3300	4100	2700	5000	2600	1100	2800	3900	1400
4	1800	880	3500	3200	4100	3100	5400	1700	1200	3500	3800	830
5	2600	1200	3700	2800	3800	4400	4200	1700	1900	2300	3800	1100
6	1200	1400	3700	2800	3700	---	4200	2000	2100	3400	3700	1400
7	1500	1600	3500	3400	4300	---	5500	2000	2100	3000	3500	1800
8	2400	1800	4200	3600	4100	---	5100	3900	2400	4800	3500	1500
9	2400	2000	3800	3100	4900	3800	5600	3300	2600	3100	2900	2400
10	2100	1800	4200	3700	4200	3600	5500	1500	2900	2800	3000	2800
11	2400	2400	3900	3500	4100	3700	5500	1800	3000	2400	3400	3700
12	2500	2500	4000	3500	4000	4200	4700	1400	3200	1500	3400	3600
13	1500	2700	4100	4300	4200	3600	4900	1300	3400	1800	3400	4100
14	3600	3000	3800	4400	3400	4000	5000	450	1900	2700	3400	4100
15	2600	3100	1100	4500	2500	3900	4700	490	1800	2300	3400	2600
16	2700	3000	460	3300	1600	4300	4700	830	340	2500	3500	2900
17	3000	3100	850	5800	1600	4400	5300	1100	320	2700	3500	3100
18	2800	2700	2100	3700	1900	4300	4800	1300	500	2900	3500	3800
19	2800	2400	1600	3500	1700	4200	4100	1500	710	3000	3600	4000
20	3000	2700	1500	3700	1800	4200	4500	1400	950	3600	3600	3700
21	3200	3200	1800	3600	2300	4200	4900	1700	1200	3600	3600	4100
22	870	3800	2100	3500	2100	4200	5300	2200	1500	3500	3400	4100
23	980	4300	2500	3800	1900	4400	4400	2100	1400	3700	3500	4300
24	1200	4500	2300	4000	3200	4200	4200	2300	2300	3700	3800	4200
25	3600	3600	2400	4200	3500	4200	4300	2500	2200	3800	3400	5300
26	1900	5000	3100	4200	3600	4300	1400	2500	2300	3800	3100	5000
27	1500	2800	3400	3800	3200	6100	1400	1200	2300	3800	3300	5900
28	1600	3900	3400	4000	3700	4700	97	1800	2900	3900	3500	5100
29	1200	3900	3500	3100	4300	4200	460	2100	3000	3800	3600	4700
30	370	4000	3600	3600	---	3800	690	1500	2600	3800	3700	4500
31	120	---	3200	3500	---	4600	---	850	---	3800	3500	---
MONTH	2000	2600	3000	3700	3300	4100	4200	1700	1600	3200	3500	3400

DISSOLVED CHLORIDE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	661	1700	462	443	295	226	188	269	1160	433	105	16
2	536	667	457	455	258	220	172	669	467	362	135	3300
3	637	577	591	408	211	190	190	2820	466	344	99	1470
4	864	606	537	278	233	208	190	834	337	575	87	995
5	1550	657	605	270	285	283	216	439	455	403	98	892
6	375	681	666	382	270	---	148	344	513	1010	83	496
7	338	627	676	588	253	---	192	360	441	734	73	375
8	449	647	807	524	242	---	179	1470	442	826	80	248
9	393	626	757	382	303	236	196	2540	432	416	180	347
10	303	468	843	460	249	214	310	532	419	313	107	377
11	323	545	724	443	245	218	254	371	378	656	79	475
12	300	521	698	448	262	235	177	622	369	809	59	452
13	166	519	650	533	331	202	173	9540	353	596	53	727
14	379	544	663	353	314	215	160	3290	479	597	56	539
15	264	537	1950	340	462	192	265	1110	17620	278	73	284
16	257	493	915	331	371	222	252	828	4790	204	49	247
17	271	526	707	947	370	225	230	738	1140	155	32	216
18	305	380	1120	470	412	207	169	607	702	245	24	207
19	307	327	500	396	328	213	143	542	713	266	20	173
20	406	362	359	413	328	203	181	390	740	255	29	121
21	4690	489	379	422	364	205	185	374	672	212	27	132
22	651	678	427	405	265	194	173	383	650	187	40	122
23	598	741	452	425	181	214	142	321	488	178	32	117
24	406	710	390	415	249	228	123	296	675	171	23	105
25	2230	538	365	396	243	213	126	502	531	154	75	129
26	1600	794	458	370	221	207	50	882	462	145	62	134
27	655	468	485	329	200	280	5630	239	463	124	66	174
28	695	575	453	282	228	203	185	260	637	116	39	151
29	832	492	467	201	264	181	184	4880	531	124	20	153
30	5440	473	519	255	---	166	167	2110	420	123	11	145
31	1410	---	425	261	---	199	---	4440	---	122	25	---
MONTH	913	599	629	407	284	214	365	1390	1270	359	63	444

07305000 NORTH FORK RED RIVER NEAR HEADRICK, OKLA.--Continued

DISSOLVED SOLIDS, IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3860	1110	8230	7320	8360	7910	8950	2750	1390	6660	7380	6930
2	3830	1080	6990	7650	8560	7120	8760	2670	1460	6240	9280	5740
3	5230	1460	7970	6930	8500	5840	10200	5590	2640	6070	8170	3250
4	4070	2070	7320	6800	8500	6530	10920	4080	2820	7320	7970	1960
5	5670	2710	7780	5980	7840	8950	12350	3970	4270	5130	7640	2680
6	2810	3190	7780	6080	7710	---	8690	4440	4770	7060	7710	3230
7	3450	3740	7380	7060	8760	---	11050	4490	4740	6370	7320	4060
8	5220	4140	8560	7510	8430	---	10330	8170	5280	9740	7380	3460
9	5310	4510	7970	6530	9930	7910	11240	6990	5010	6660	6200	5310
10	4740	4180	8690	7710	8630	7510	11050	3600	6150	5940	6470	6100
11	5340	5220	8170	7320	8500	7650	11180	4200	6470	5270	7060	7650
12	5400	5460	8230	7380	8360	8560	9540	3170	6730	3590	7060	7450
13	3420	5770	8430	8820	8690	7450	10000	3100	7060	4070	7120	8430
14	7510	6400	7970	8950	7190	8230	10070	1080	4410	5760	7060	8410
15	5720	6600	2560	9220	5490	8170	9540	1180	4230	5050	7120	5700
16	5870	6380	1120	6990	3770	8890	9540	1960	840	5480	7250	6120
17	6300	6660	2000	11570	3720	9020	10780	2610	794	5900	7250	6530
18	6060	5750	4640	7710	4340	6760	9800	2930	1190	6260	7380	7970
19	6100	5300	3730	7320	3800	8560	8430	3580	1680	6360	7450	8300
20	6400	5900	3490	7780	4060	8630	9150	3340	2250	7580	7450	7780
21	6860	6730	4180	7580	5050	8690	9930	3920	2030	7450	7450	8430
22	2050	7910	4770	7320	4760	8690	10780	4790	3490	7250	7190	8500
23	2320	8820	5450	7970	4350	9020	9020	4750	3330	7650	7320	8890
24	2760	9280	5060	8360	6730	8690	8560	5140	5150	7780	7840	8630
25	7510	7450	5210	8630	7250	8560	8760	5540	4860	7910	7060	10650
26	4380	10130	6660	8560	7450	8760	3320	5370	4980	7970	6660	10070
27	3440	6100	7120	7910	6800	12220	3170	2770	5110	7970	6930	11770
28	3620	8170	7190	8300	7650	9610	276	4110	6230	8100	7320	10330
29	2740	8040	7380	6600	8760	8630	1100	4690	6350	7970	7580	9610
30	894	8230	7450	7580	---	7970	1640	3390	5630	7910	7650	9150
31	327	---	6800	7250	---	9410	---	2010	---	7840	7380	---
MONTH	4490	5620	6330	7700	6970	8430	8600	3880	4090	6720	7360	7100

DISSOLVED SOLIDS (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1540	4100	956	929	610	470	387	632	2790	918	219	34
2	1250	1610	963	950	532	462	355	1570	1120	775	276	7140
3	1400	1380	1230	860	436	410	385	6120	1100	737	205	3430
4	1990	1430	1130	587	482	441	383	1930	792	1210	181	2360
5	3370	1540	1260	581	593	580	434	1020	1040	887	203	2090
6	879	1590	1390	821	562	---	305	778	1150	2130	173	1160
7	791	1460	1420	1240	520	---	388	812	984	1570	152	865
8	987	1490	1660	1100	501	---	362	3040	969	1680	167	579
9	860	1410	1570	811	617	491	395	5360	938	882	385	759
10	678	1070	1740	958	512	446	626	1240	897	673	227	808
11	706	1200	1500	929	505	454	513	850	803	1440	166	991
12	656	1140	1450	937	542	485	361	1460	781	1890	124	945
13	388	1120	1340	1100	681	422	351	22350	743	1370	112	1500
14	791	1160	1380	725	660	445	326	7960	1080	1290	118	1110
15	572	1140	4580	697	1010	397	541	2680	40290	614	154	615
16	554	1050	2210	698	866	456	515	1960	11750	444	104	529
17	578	1120	1670	1910	864	463	466	1730	2810	334	67	459
18	655	823	2520	979	938	426	344	1420	1880	524	58	431
19	659	716	1170	830	765	439	296	1270	1700	567	42	359
20	864	780	838	861	757	419	371	911	1740	532	60	252
21	9910	1040	869	880	804	422	376	869	1580	442	56	273
22	1540	1410	953	850	591	399	349	854	1520	392	83	252
23	1410	1520	986	883	412	438	292	718	1140	372	67	240
24	952	1450	861	858	527	469	254	652	1490	357	49	217
25	4670	1130	802	815	509	439	260	1090	1180	320	158	262
26	3620	1610	972	763	463	426	117	1930	1020	301	131	272
27	1530	1000	1020	683	422	561	13190	560	1020	258	140	349
28	1620	1190	951	583	475	415	525	599	1360	241	81	307
29	1950	1020	977	428	544	373	445	10920	1130	258	41	311
30	13300	978	1090	532	---	344	397	4900	912	256	23	296
31	3850	---	899	568	---	407	---	10490	---	254	52	---
MONTH	2080	1320	1370	849	610	443	810	3180	2920	772	131	973

07311000 EAST CACHE CREEK NEAR WALTERS, OKLA.

LOCATION.--Lat 34°21'44", long 98°16'50", on south line of SE1/4SE1/4 sec. 19, T.2 S., R.10 W., Cotton County, at gaging station on State Highway 53, 1.75 mi (2.8 km) west of Walters, 12.2 mi (19.6 km) upstream from West Cache Creek, and at mile 19.7 (31.7 km).

DRAINAGE AREA.--675 sq mi (1,748.2 km²).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTAN-TANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
OCT.								
05...	57	33	74	28	27	26	1.6	213
15...	27	66	148	8	48	59	3.0	343
25...	26	65	186	0	47	62	18	379
NOV.								
05...	22	62	200	0	54	60	18	409
15...	19	65	196	4	59	62	7.7	392
24...	33	70	94	38	57	66	21	375
DEC.								
05...	69	73	30	56	59	69	.30	365
15...	271	26	98	4	21	23	4.6	191
25...	29	61	164	10	55	60	22	398
JAN.								
05...	24	70	200	0	63	66	23	414
15...	25	69	198	0	63	67	26	426
25...	24	70	172	14	66	69	11	410
FEB.								
05...	25	77	186	8	60	74	15	434
15...	28	74	204	0	64	74	20	445
25...	23	79	240	0	61	74	8.5	462
MAR.								
05...	22	73	206	0	67	70	26	457
15...	21	78	218	0	64	77	18	461
25...	20	83	220	6	59	78	6.5	432
APR.								
05...	17	76	166	22	57	77	6.4	394
15...	18	78	248	0	55	74	20	454
25...	22	53	190	0	50	52	12	352
MAY								
05...	37	33	150	0	40	27	12	250
15...	78	26	142	0	29	12	5.5	212
25...	29	63	204	0	60	59	23	406
JUNE								
05...	20	65	184	0	56	62	18	395
15...	38	76	214	0	63	69	19	431
24...	14	41	140	0	29	32	11	247
JULY								
05...	13	70	212	0	64	68	8.4	401
15...	14	80	210	0	72	77	10	437
25...	9.6	73	206	0	68	62	10	433
AUG.								
05...	9.1	83	228	0	69	81	8.6	462
15...	13	45	144	0	50	41	9.9	297
25...	17	110	164	0	54	170	5.6	528
SEP.								
05...	24	42	120	0	34	40	9.6	249
15...	13	71	202	0	60	69	11	422
25...	12	72	188	0	58	71	17	426

07311000 EAST CACHE CREEK NEAR WALTERS, OKLA.

PERIOD OF RECORD.--Chemical analyses: October 1951 to September 1953, October 1960 to September 1961, October 1962 to September 1963, October 1969 to current year.
Water temperatures: October 1951 to September 1953, October 1969 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.							
05...	.29	32.8	94	0	1.5	330	9.6
15...	.47	25.0	12	0	8.3	557	10.3
25...	.52	26.6	160	7	2.2	624	8.3
NOV.							
05...	.56	24.3	180	16	2.0	668	7.9
15...	.53	20.1	170	3	2.2	646	8.5
24...	.51	33.4	150	9	2.5	612	9.5
DEC.							
05...	.50	68.0	130	12	2.8	579	9.9
15...	.26	140	84	0	1.2	295	8.6
25...	.54	31.2	170	19	2.0	626	8.7
JAN.							
05...	.56	26.8	190	26	2.2	690	7.7
15...	.58	28.8	200	38	2.1	699	7.5
25...	.56	26.6	180	16	2.3	678	8.9
FEB.							
05...	.59	29.3	180	14	2.5	711	8.6
15...	.61	33.6	190	23	2.3	732	7.9
25...	.63	28.7	200	3	2.4	766	7.5
MAR.							
05...	.62	27.1	200	31	2.2	728	7.8
15...	.63	26.1	200	21	2.4	750	7.5
25...	.59	23.3	180	0	2.7	729	8.5
APR.							
05...	.54	18.1	170	0	2.5	672	9.0
15...	.62	22.1	210	7	2.3	764	7.6
25...	.48	20.9	170	14	1.8	592	7.6
MAY							
05...	.35	25.8	130	7	1.3	416	8.0
15...	.29	44.6	120	4	1.0	346	7.9
25...	.55	31.8	190	23	2.0	654	7.6
JUNE							
05...	.54	21.3	180	29	2.1	644	7.8
15...	.59	44.2	190	14	2.4	714	7.7
24...	.34	9.34	110	0	1.7	415	7.6
JULY							
05...	.19	14.1	180	6	2.3	657	7.9
15...	.59	16.5	180	8	2.6	722	7.5
25...	.59	15.4	180	11	2.4	693	8.0
AUG.							
05...	.63	15.6	200	13	2.6	772	7.7
15...	.40	14.3	130	12	1.7	495	7.4
25...	.72	33.2	200	65	3.4	916	7.0
SEP.							
05...	.34	22.1	110	12	1.7	408	7.7
15...	.57	14.8	180	14	2.3	686	7.6
25...	.58	13.8	180	26	2.3	682	7.4

07311000 EAST CACHE CREEK NEAR WALTERS, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	506	443	662	624	789	759	784	260	467	681	736	557
2	492	538	---	636	783	743	808	283	624	665	753	627
3	486	607	655	662	765	767	783	318	548	664	755	611
4	582	636	945	692	775	754	780	391	508	656	752	398
5	360	667	579	707	711	749	672	413	636	663	772	408
6	424	678	586	750	766	750	787	476	684	606	746	635
7	482	664	544	707	768	769	794	386	682	645	777	686
8	426	690	489	680	775	757	800	412	685	683	798	556
9	494	702	465	745	793	751	---	482	685	693	770	419
10	490	712	384	744	792	759	806	528	690	603	803	572
11	580	715	402	740	780	747	826	---	699	662	465	620
12	614	714	436	731	739	748	829	301	724	646	554	667
13	603	704	469	715	782	745	827	279	730	717	407	686
14	625	698	476	698	782	748	831	300	719	804	471	704
15	557	685	303	729	732	768	764	344	700	720	504	686
16	660	709	311	736	790	778	821	401	685	750	540	692
17	667	738	326	717	776	788	843	440	392	742	599	697
18	714	776	363	737	753	782	835	540	625	760	627	479
19	699	744	412	732	726	777	760	543	618	767	668	686
20	606	748	438	765	810	782	383	568	396	725	717	519
21	707	766	490	730	783	794	548	657	570	696	743	388
22	665	750	495	720	780	776	568	660	669	706	676	457
23	667	766	532	761	801	841	329	636	692	712	504	580
24	478	727	588	739	785	841	528	650	411	721	690	657
25	630	---	841	714	766	729	592	666	---	697	916	682
26	591	725	640	732	785	815	590	683	590	702	596	668
27	652	669	655	730	774	814	681	684	---	706	653	720
28	724	682	637	765	773	820	260	713	642	676	682	775
29	---	678	635	---	761	818	297	735	667	711	633	638
30	619	685	587	752	---	788	386	692	675	737	617	674
31	666	---	603	776	---	777	---	668	---	725	566	---
MONTH	569	698	525	721	772	775	673	504	621	698	654	596

07311000 EAST CACHE CREEK NEAR WALTERS, OKLA.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.0	17.5	6.5	9.0	3.0	14.0	14.0	18.5	24.0	28.0	28.0	26.0
2	24.5	17.0	---	8.5	2.5	10.0	15.0	19.5	24.5	29.0	28.0	25.0
3	22.0	15.5	4.5	7.0	2.0	11.5	15.5	20.0	25.0	27.5	28.0	24.0
4	22.0	15.0	5.0	3.0	2.5	11.5	14.5	20.5	25.0	25.0	27.5	23.0
5	22.0	15.0	5.5	3.0	4.0	11.0	17.0	20.5	26.0	25.0	28.0	24.0
6	22.0	14.0	5.5	4.0	4.0	12.0	20.0	21.0	26.0	25.0	28.0	25.0
7	21.0	10.5	6.5	3.0	4.0	14.5	21.0	18.0	25.5	25.0	28.0	25.5
8	20.0	11.5	6.5	3.0	4.5	13.0	19.0	19.0	26.0	25.0	28.5	27.0
9	19.0	11.0	6.0	6.0	5.0	13.0	---	20.0	25.0	27.0	28.0	28.0
10	18.0	11.0	7.0	6.0	5.0	15.5	20.5	20.0	25.0	27.0	26.0	28.0
11	19.0	11.5	7.5	6.0	3.0	17.0	22.5	---	26.0	27.0	27.0	28.0
12	18.5	12.0	7.5	7.0	2.5	19.0	24.5	19.0	26.0	26.5	26.5	28.0
13	18.5	14.0	7.5	5.0	4.5	19.0	24.5	19.0	26.0	28.5	27.0	28.0
14	18.0	15.0	7.5	4.0	6.5	19.0	24.5	20.0	26.0	28.5	27.0	28.0
15	20.0	15.5	7.5	1.0	1.0	18.5	24.0	21.0	25.5	29.0	27.0	28.0
16	20.5	15.5	8.0	1.5	8.0	18.5	21.0	23.0	26.0	28.5	26.5	26.5
17	21.0	15.5	8.0	3.0	9.0	18.5	21.0	24.0	26.0	28.0	26.0	27.0
18	20.5	14.5	8.0	6.0	9.0	18.0	21.5	24.0	26.5	27.5	28.0	27.0
19	20.0	12.5	9.0	7.0	9.0	18.0	21.5	24.0	27.0	27.5	29.0	27.0
20	18.0	12.5	9.0	7.0	11.0	19.0	20.5	24.5	28.0	28.0	28.5	26.0
21	18.5	11.5	7.0	6.0	11.0	19.0	20.5	25.0	27.0	30.0	28.0	22.0
22	18.0	9.5	8.5	6.0	10.5	19.0	21.0	25.0	27.5	28.0	27.5	21.0
23	18.0	8.5	9.0	8.0	12.5	19.0	20.5	25.0	27.5	28.5	27.0	22.0
24	16.5	9.0	9.5	9.0	13.0	17.5	20.0	25.0	28.0	29.0	27.0	23.0
25	17.0	---	10.5	7.0	13.0	17.5	18.0	27.0	29.0	29.0	26.0	24.0
26	17.5	8.5	11.5	6.5	11.0	19.0	17.0	26.0	30.0	29.0	25.0	24.0
27	18.5	9.0	12.0	3.0	12.0	18.5	17.5	26.5	30.0	29.5	25.5	24.0
28	18.0	7.5	10.0	3.0	13.5	16.0	15.0	26.0	30.0	29.0	26.0	24.5
29	---	7.5	9.0	---	10.0	10.0	17.0	25.0	29.0	29.0	26.0	23.5
30	18.5	6.5	10.0	3.0	---	13.5	18.0	25.5	28.0	29.0	26.0	21.0
31	17.0	---	9.5	3.0	---	12.5	---	26.0	---	29.0	27.0	---
MONTH	19.5	12.0	8.0	5.0	7.5	16.0	19.5	22.5	26.5	28.0	27.0	25.5

07311200 BLUE BEAVER CREEK NEAR CACHE, OKLA.
(Hydrologic bench-mark station)

LOCATION.--Lat 34°37'24", long 98°33'48", in NE1/4NE1/4 sec.28, T.2 N., R.13 W., Comanche County, at gaging station at bridge on U.S. Highway 62, 3,000 ft (914.4 m) upstream from St. Louis - San Francisco Railway Co. bridge, 4.0 mi (6.4 km) east of Cache, and at mile 12.0 (19.3 km).

DRAINAGE AREA.--24.6 sq mi (63.7 km²).

PERIOD OF RECORD.--Water year 1965-67 (partial-record station), October 1967 to current year.

REMARKS.--No flow July 11- Sept. 30.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)
OCT.												
20...	2.6	16	16	4.4	12	1.7	70	0	18	5.5	.3	--
NOV.												
09...	3.9	--	--	--	10	--	62	0	90	5.0	--	--
30...	1.7	--	--	--	--	--	--	--	--	--	--	--
DEC.												
22...	10	12	10	3.2	6.0	1.2	46	0	16	4.5	.0	--
JAN.												
13...	3.2	14	12	3.2	9.0	1.0	54	0	17	5.0	.0	--
FEB.												
02...	1.6	14	12	3.9	11	.9	58	0	18	6.0	.0	--
24...	1.3	--	--	--	--	--	--	--	--	--	--	--
MAR.												
16...	.70	6.3	15	4.4	14	1.5	74	0	17	6.0	.3	.02
APR.												
05...	.62	7.2	16	3.9	14	1.6	70	0	17	6.6	.0	.02
27...	235	--	--	--	--	--	--	--	--	--	--	--
MAY												
17...	9.4	13	12	3.4	8.0	1.3	60	0	18	6.0	.4	.11
JUNE												
08...	.02	13	16	4.6	15	1.0	82	0	15	6.2	--	.02
29...	.05	13	10	5.4	15	2.1	96	0	9.5	7.0	.3	.14

DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]											
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	--
[illegible]											
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	--
[illegible]	--	--	--	--	--	--	--	--	[illegible]	--	--
[illegible]											
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	--
[illegible]											
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	--
[illegible]											
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	--
[illegible]	--	--	--	--	--	--	--	--	[illegible]	--	--
[illegible]											
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]											
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	--	--	--	--	--	--	--	--	[illegible]	--	--
[illegible]											
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	--
[illegible]											
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

07316500 WASITA RIVER NEAR CHEYENNE, OKLA.

LOCATION.--Lat 35°37'35", long 99°40'05", in SE1/4 sec. 5, T.13 N., R.23 W., Roger Mills County, at gaging station at bridge on U.S. Highway 283, 0.5 mi (0.8 km) downstream from Sergeant Major Creek, 1.0 mi (1.6 km) north of Cheyenne, 5.2 mi (8.4 km) upstream from Dead Indian Creek, and at mile 543.9 (875.1 km).

DRAINAGE AREA.--794 sq mi (2,056.5 km^2).

PERIOD OF RECORD.--Chemical analyses: February 195[illegible] to September 1953, October 1959 to August 1961, March 1969 to current year.

REMARKS.--No flow Oct. 1-Dec. 6, Apr. 10-11, 17-25 27-30, May 1-3, 8-10, June 10-15, June 19-July 4, July 19-Aug. 21, Aug. 23-Sept. 30.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	PHOSPHATE (PO4) (MG/L)
DEC.									
07...	.38	150	410	0	600	80	.20	.16	.50
JAN.									
26...	1.6	160	372	2	620	83	.20	.16	.49
FEB.									
16...	3.0	170	368	0	630	82	.00	.08	2.1
MAR.									
28...	.09	180	316	0	790	90	.30	1.2	3.7
MAY									
31...	11	120	306	6	410	64	.06	.10	.30
JULY									
13...	4.6	68	214	0	400	32	.30	.18	.56

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
DEC.									
07...	1070	1.46	1.10	560	206	2.8	1510	8.3	--
JAN.									
26...	1080	1.49	4.71	720	412	2.6	1600	8.6	7.0
FEB.									
16...	1080	1.46	10.0	760	418	2.6	1700	8.2	9.0
MAR.									
28...	1540	2.09	0.87	810	551	2.9	1900	8.3	12.0
MAY									
31...	1090	1.47	3.21	520	244	2.3	1390	8.4	25.0
JULY									
13...	802	1.09	9.53	483	304	1.0	1100	8.2	31.0

FIELD ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION
[illegible]					
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]					
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]					
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]					
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]					
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]					
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

07324200 WASHITA RIVER NEAR HAMMON, OKLA.

LOCATION.--Lat 35°39'23", long 99°18'21", on west line of sec. 26, T.14 N., R.20 W., Custer County, at gaging station on county road bridge, 2.2 mi (3.5 km) downstream from Quartermaster Creek, 4.7 mi (7.6 km) northeast of Hammon, and at mile 494.5 (795.6 km).

DRAINAGE AREA.--1,387 sq mi (3,592.3 km²).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
OCT.								
25...	.18	14	200	0	85	8.0	.80	340
DEC.								
05...	.10	14	282	0	300	12	1.8	740
14...	.01	62	344	0	770	36	.30	1540
15...	.04	17	360	0	460	14	.20	1040
25...	.02	25	334	16	480	22	17	1110
MAY								
12...	24	23	208	0	200	15	1.1	603
15...	6.4	26	124	0	440	17	.80	880
21...	.20	26	192	0	440	17	1.7	875
JULY								
15...	2.9	11	88	0	440	6.0	.60	675
21...	.27	13	160	0	390	8.4	2.2	743

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	1310	---	---	---	---	---	---	---	---
2	---	---	---	1320	---	---	---	---	---	---	---	---
3	---	---	---	1370	---	---	---	---	---	---	---	---
4	---	---	932	---	---	---	---	---	---	---	---	---
5	---	---	956	---	---	---	---	---	---	---	---	---
6	---	---	917	---	---	---	---	---	---	---	---	---
7	---	---	1280	---	---	---	---	---	---	---	---	---
8	---	---	1210	1090	---	---	---	---	---	---	---	---
9	---	---	1250	1060	---	---	---	---	---	---	---	---
10	---	---	1270	---	---	---	---	---	---	---	---	---
11	---	---	1280	---	---	---	---	---	---	693	---	---
12	---	---	1280	---	---	---	---	727	---	966	---	---
13	---	---	1290	---	---	---	---	705	---	1220	---	---
14	---	---	1320	---	---	---	---	811	---	952	---	---
15	---	---	1290	---	---	---	---	1050	---	912	---	---
16	---	---	1270	---	---	---	---	955	1060	912	---	---
17	---	---	1310	---	---	---	---	967	1190	880	---	---
18	1030	---	1300	---	---	---	---	970	---	915	---	---
19	1030	---	1320	---	---	---	---	1210	---	932	---	---
20	1060	---	1300	---	---	---	---	1010	---	966	---	---
21	[illegible]	---	[illegible]	---	---	---	---	[illegible]	---	[illegible]	---	---
22	[illegible]	---	[illegible]	---	---	---	---	---	---	---	---	---
23	[illegible]	---	[illegible]	---	---	---	---	---	---	---	---	---
24	[illegible]	---	[illegible]	---	---	---	---	---	---	---	---	---
25	[illegible]	---	[illegible]	---	---	---	---	---	---	---	---	---
26	[illegible]	---	[illegible]	---	---	---	---	---	---	---	---	---
27	[illegible]	---	[illegible]	---	---	---	---	---	---	---	---	---
28	---	---	[illegible]	---	---	---	---	---	---	---	---	---
29	---	---	[illegible]	---	---	---	---	---	---	---	---	---
30	---	---	[illegible]	---	---	---	---	---	---	---	---	---
31	---	---	[illegible]	---	---	---	---	---	---	---	---	---
[illegible]	---	---	[illegible]	---	---	---	---	---	---	---	---	---

07324200 WASHITA RIVER NEAR HAMMON, OKLA.

PERIOD OF RECORD.--Chemical analyses: October 1969 to current year.
Water temperatures: October 1969 to current year.

REMARKS.--No flow Oct. 1-17, 28-31, Nov. 1-Dec. 1, Jan. 4-7, Jan. 10-May 11, May 22-28, 30-31, June 1-15, 18-30, July 1-10, July 22-Sept. 11, Sept. 14-30.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.							
25...	.46	.16	220	56	.4	507	7.8
DEC.							
05...	1.01	.20	530	300	.3	948	7.5
14...	2.09	.04	1000	720	--	1840	8.2
15...	1.41	.11	750	460	.3	1260	7.7
25...	1.51	.06	780	480	.4	1320	8.6
MAY							
10...	.82	39.1	360	190	.5	727	7.5
15...	1.20	15.0	530	430	.5	1020	8.3
21...	1.19	.07	590	430	.5	1060	8.0
JULY							
15...	.92	5.28	500	480	.2	903	7.7
21...	1.01	.54	520	390	.2	957	7.8

TEMPERATURE (°C) OF WATER, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	[illegible]	---	---	---	---	---	---	---	---
2	---	---	[illegible]	---	---	---	---	---	---	---	---	---
3	---	---	[illegible]	---	---	---	---	---	---	---	---	---
4	---	10.0	[illegible]	---	---	---	---	---	---	---	---	---
5	---	10.0	[illegible]	---	---	---	---	---	---	---	---	---
6	---	[illegible]	[illegible]	---	---	---	---	---	---	---	---	---
7	---	---	[illegible]	---	---	---	---	---	---	---	---	---
8	---	---	[illegible]	---	---	---	[illegible]	---	---	---	---	---
9	---	---	[illegible]	---	---	---	---	---	---	---	---	---
10	---	---	[illegible]	---	---	---	---	---	---	---	---	---
11	---	---	[illegible]	---	---	---	---	---	---	[illegible]	---	---
12	---	[illegible]	[illegible]	---	---	---	---	---	---	[illegible]	---	[illegible]
13	---	[illegible]	[illegible]	---	---	---	---	---	---	---	---	[illegible]
14	---	[illegible]	[illegible]	---	---	---	---	---	---	---	---	---
15	---	---	[illegible]	---	---	---	---	---	---	---	---	---
16	---	---	[illegible]	---	---	---	[illegible]	---	[illegible]	---	---	---
17	---	---	[illegible]	---	---	---	---	---	[illegible]	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	[illegible]	---	---	---	---	---	---	---	---	---	---	---
20	[illegible]	---	---	---	---	---	---	---	---	---	---	---
21	[illegible]	---	---	---	---	---	---	---	---	---	---	---
22	[illegible]	---	---	---	---	---	---	---	---	---	---	---
23	[illegible]	---	---	---	[illegible]	---	---	---	---	---	---	---
24	[illegible]	---	[illegible]	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	[illegible]	---	---	---	---	---	---	---	---	---
28	[illegible]	---	---	---	---	---	---	---	---	---	---	---
29	[illegible]	---	[illegible]	---	[illegible]	---	---	---	---	---	---	---
30	[illegible]	---	---	---	---	---	---	---	---	---	---	---
31	[illegible]	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

07324200 WASHITA RIVER NEAR HAMMON, OKLA.--Continued

DISSOLVED SULFATE (SO_4), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	660	---	---	---	---	---	---	---	---
2	---	---	---	660	---	---	---	---	---	---	---	---
3	---	---	---	690	---	---	---	---	---	---	---	---
4	---	---	470	---	---	---	---	---	---	---	---	---
5	---	---	480	---	---	---	---	---	---	---	---	---
6	---	---	460	---	---	---	---	---	---	---	---	---
7	---	---	600	---	---	---	---	---	---	---	---	---
8	---	---	610	750	---	---	---	---	---	---	---	---
9	---	---	630	730	---	---	---	---	---	---	---	---
10	---	---	640	---	---	---	---	---	---	---	---	---
11	---	---	640	---	---	---	---	---	---	350	---	---
12	---	---	640	---	---	---	---	360	---	470	---	---
13	---	---	640	---	---	---	---	390	---	500	---	---
14	---	---	660	---	---	---	---	400	---	480	---	---
15	---	---	650	---	---	---	---	530	---	460	---	---
16	---	---	640	---	---	---	---	480	520	460	---	---
17	---	---	660	---	---	---	---	470	550	450	---	---
18	520	---	650	---	---	---	---	690	---	450	---	---
19	520	---	660	---	---	---	---	600	---	470	---	---
20	720	---	690	---	---	---	---	600	---	470	---	---
21	320	---	750	---	---	---	---	540	---	480	---	---
22	200	---	660	---	---	---	---	---	---	---	---	---
23	200	---	660	---	---	---	---	---	---	---	---	---
24	220	---	680	---	---	---	---	---	---	---	---	---
25	240	---	700	---	---	---	---	---	---	---	---	---
26	240	---	730	---	---	---	---	---	---	---	---	---
27	170	---	670	---	---	---	---	---	---	---	---	---
28	---	---	680	---	---	---	---	---	---	---	---	---
29	---	---	660	---	---	---	---	---	---	---	---	---
30	---	---	670	---	---	---	---	---	---	---	---	---
31	---	---	660	---	---	---	---	---	---	---	---	---
MONTH	---	---	640	---	---	---	---	---	---	---	---	---

DISSOLVED SULFATE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	[illegible]	---	---	---	---	---	---	---	---
2	---	---	---	[illegible]	---	---	---	---	---	---	---	---
3	---	---	---	[illegible]	---	---	---	---	---	---	---	---
4	---	---	[illegible]	---	---	---	---	---	---	---	---	---
5	---	---	[illegible]	---	---	---	---	---	---	---	---	---
6	---	---	[illegible]	---	---	---	---	---	---	---	---	---
7	---	---	[illegible]	---	---	---	---	---	---	---	---	---
8	---	---	[illegible]	[illegible]	---	---	---	---	---	---	---	---
9	---	---	[illegible]	[illegible]	---	---	---	---	---	---	---	---
10	---	---	[illegible]	---	---	---	---	---	---	---	---	---
11	---	---	[illegible]	---	---	---	---	---	---	[illegible]	---	---
12	---	---	[illegible]	---	---	---	---	[illegible]	---	[illegible]	---	---
13	---	---	[illegible]	---	---	---	---	[illegible]	---	[illegible]	---	---
14	---	---	[illegible]	---	---	---	---	[illegible]	---	[illegible]	---	---
15	---	---	[illegible]	---	---	---	---	[illegible]	---	[illegible]	---	---
16	---	---	[illegible]	---	---	---	---	[illegible]	[illegible]	[illegible]	---	---
17	---	---	[illegible]	---	---	---	---	[illegible]	[illegible]	[illegible]	---	---
18	[illegible]	---	[illegible]	---	---	---	---	[illegible]	---	[illegible]	---	---
19	[illegible]	---	[illegible]	---	---	---	---	[illegible]	---	[illegible]	---	---
20	[illegible]	---	[illegible]	---	---	---	---	[illegible]	---	[illegible]	---	---
21	[illegible]	---	[illegible]	---	---	---	---	[illegible]	---	[illegible]	---	---
22	[illegible]	---	[illegible]	---	---	---	---	---	---	---	---	---
23	[illegible]	---	[illegible]	---	---	---	---	---	---	---	---	---
24	[illegible]	---	[illegible]	---	---	---	---	---	---	---	---	---
25	[illegible]	---	[illegible]	---	---	---	---	---	---	---	---	---
26	[illegible]	---	[illegible]	---	---	---	---	---	---	---	---	---
27	[illegible]	---	[illegible]	---	---	---	---	---	---	---	---	---
28	---	---	[illegible]	---	---	---	---	---	---	---	---	---
29	---	---	[illegible]	---	---	---	---	---	---	---	---	---
30	---	---	[illegible]	---	---	---	---	---	---	---	---	---
31	---	---	[illegible]	---	---	---	---	---	---	---	---	---
MONTH	---	---	[illegible]	---	---	---	---	---	---	---	---	---

07324200 WASHITA RIVER NEAR HAMMON, OKLA.--Continued

DISSOLVED CHLORIDE (CL), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	16	---	---	---	---	---	---	---	---
2	---	---	---	16	---	---	---	---	---	---	---	---
3	---	---	---	17	---	---	---	---	---	---	---	---
4	---	---	11	---	---	---	---	---	---	---	---	---
5	---	---	12	---	---	---	---	---	---	---	---	---
6	---	---	11	---	---	---	---	---	---	---	---	---
7	---	---	15	---	---	---	---	---	---	---	---	---
8	---	---	15	18	---	---	---	---	---	---	---	---
9	---	---	15	18	---	---	---	---	---	---	---	---
10	---	---	15	---	---	---	---	---	---	---	---	---
11	---	---	16	---	---	---	---	---	---	8.4	---	---
12	---	---	16	---	---	---	---	8.9	---	12	---	---
13	---	---	16	---	---	---	---	9.6	---	12	---	---
14	---	---	16	---	---	---	---	9.8	---	12	---	---
15	---	---	16	---	---	---	---	13	---	11	---	---
16	---	---	15	---	---	---	---	12	13	11	---	---
17	---	---	16	---	---	---	---	11	13	11	---	---
18	13	---	16	---	---	---	---	12	---	11	---	---
19	13	---	16	---	---	---	---	15	---	11	---	---
20	18	---	17	---	---	---	---	15	---	12	---	---
21	7.8	---	18	---	---	---	---	13	---	12	---	---
22	4.8	---	16	---	---	---	---	---	---	---	---	---
23	4.9	---	16	---	---	---	---	---	---	---	---	---
24	5.4	---	17	---	---	---	---	---	---	---	---	---
25	5.7	---	17	---	---	---	---	---	---	---	---	---
26	5.9	---	18	---	---	---	---	---	---	---	---	---
27	4.2	---	16	---	---	---	---	---	---	---	---	---
28	---	---	17	---	---	---	---	---	---	---	---	---
29	---	---	16	---	---	---	---	---	---	---	---	---
30	---	---	16	---	---	---	---	---	---	---	---	---
31	---	---	16	---	---	---	---	---	---	---	---	---
MONTH	---	---	16	---	---	---	---	---	---	---	---	---

DISSOLVED CHLORIDE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	0.00	---	---	---	---	---	---	---	---
2	---	---	---	0.00	---	---	---	---	---	---	---	---
3	---	---	---	0.00	---	---	---	---	---	---	---	---
4	---	---	0.00	---	---	---	---	---	---	---	---	---
5	---	---	0.00	---	---	---	---	---	---	---	---	---
6	---	---	0.00	---	---	---	---	---	---	---	---	---
7	---	---	0.00	---	---	---	---	---	---	---	---	---
8	---	---	[illegible]	0.01	---	---	---	---	---	---	---	---
9	---	---	0.00	0.00	---	---	---	---	---	---	---	---
10	---	---	0.00	---	---	---	---	---	---	---	---	---
11	---	---	0.00	---	---	---	---	---	---	[illegible]	---	---
12	---	---	0.00	---	---	---	---	[illegible]	---	[illegible]	---	---
13	---	---	0.00	---	---	---	---	[illegible]	---	[illegible]	---	---
14	---	---	0.00	---	---	---	---	[illegible]	---	[illegible]	---	---
15	---	---	0.00	---	---	---	---	[illegible]	---	[illegible]	---	---
16	---	---	[illegible]	---	---	---	---	[illegible]	0.00	[illegible]	---	---
17	---	---	[illegible]	---	---	---	---	[illegible]	0.00	[illegible]	---	---
18	0.00	---	[illegible]	---	---	---	---	[illegible]	---	[illegible]	---	---
19	0.00	---	[illegible]	---	---	---	---	[illegible]	---	[illegible]	---	---
20	0.01	---	[illegible]	---	---	---	---	[illegible]	---	[illegible]	---	---
21	0.00	---	[illegible]	---	---	---	---	[illegible]	---	[illegible]	---	---
22	[illegible]	---	[illegible]	---	---	---	---	---	---	---	---	---
23	[illegible]	---	[illegible]	---	---	---	---	---	---	---	---	---
24	[illegible]	---	[illegible]	---	---	---	---	---	---	---	---	---
25	[illegible]	---	[illegible]	---	---	---	---	---	---	---	---	---
26	[illegible]	---	[illegible]	---	---	---	---	---	---	---	---	---
27	[illegible]	---	[illegible]	---	---	---	---	---	---	---	---	---
28	---	---	[illegible]	---	---	---	---	---	---	---	---	---
29	---	---	[illegible]	---	---	---	---	---	---	---	---	---
30	---	---	[illegible]	---	---	---	---	---	---	---	---	---
31	---	---	[illegible]	---	---	---	---	---	---	---	---	---
MONTH	---	---	[illegible]	---	---	---	---	---	---	---	---	---

07324200 WASHITA RIVER NEAR HAMMON, OKLA.--Continued

DISSOLVED SOLIDS, IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	1100	---	---	---	---	---	---	---	---
2	---	---	---	1100	---	---	---	---	---	---	---	---
3	---	---	---	1150	---	---	---	---	---	---	---	---
4	---	---	734	---	---	---	---	---	---	---	---	---
5	---	---	757	---	---	---	---	---	---	---	---	---
6	---	---	720	---	---	---	---	---	---	---	---	---
7	---	---	990	---	---	---	---	---	---	---	---	---
8	---	---	1000	1270	---	---	---	---	---	---	---	---
9	---	---	1040	1240	---	---	---	---	---	---	---	---
10	---	---	1060	---	---	---	---	---	---	---	---	---
11	---	---	1070	---	---	---	---	---	---	506	---	---
12	---	---	1070	---	---	---	---	538	---	747	---	---
13	---	---	1070	---	---	---	---	594	---	799	---	---
14	---	---	1100	---	---	---	---	608	---	753	---	---
15	---	---	1080	---	---	---	---	647	---	715	---	---
16	---	---	1060	---	---	---	---	756	837	715	---	---
17	---	---	1100	---	---	---	---	742	885	702	---	---
18	828	---	1090	---	---	---	---	778	---	708	---	---
19	828	---	1100	---	---	---	---	990	---	734	---	---
20	1220	---	1160	---	---	---	---	990	---	746	---	---
21	451	---	1280	---	---	---	---	875	---	758	---	---
22	219	---	1100	---	---	---	---	---	---	---	---	---
23	230	---	1100	---	---	---	---	---	---	---	---	---
24	269	---	1140	---	---	---	---	---	---	---	---	---
25	294	---	1170	---	---	---	---	---	---	---	---	---
26	304	---	1230	---	---	---	---	---	---	---	---	---
27	172	---	1120	---	---	---	---	---	---	---	---	---
28	---	---	1140	---	---	---	---	---	---	---	---	---
29	---	---	1100	---	---	---	---	---	---	---	---	---
30	---	---	1110	---	---	---	---	---	---	---	---	---
31	---	---	1100	---	---	---	---	---	---	---	---	---
MONTH	---	---	1060	---	---	---	---	---	---	---	---	---

DISSOLVED SOLIDS (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	0.23	---	---	---	---	---	---	---	---
2	---	---	---	0.23	---	---	---	---	---	---	---	---
3	---	---	---	0.21	---	---	---	---	---	---	---	---
4	---	---	0.19	---	---	---	---	---	---	---	---	---
5	---	---	0.20	---	---	---	---	---	---	---	---	---
6	---	---	0.15	---	---	---	---	---	---	---	---	---
7	---	---	0.18	---	---	---	---	---	---	---	---	---
8	---	---	0.16	[illegible]	---	---	---	---	---	---	---	---
9	---	---	0.16	[illegible]	---	---	---	---	---	---	---	---
10	---	---	0.17	---	---	---	---	---	---	---	---	---
11	---	---	0.17	---	---	---	---	---	---	1.0	---	---
12	---	---	0.17	---	---	---	---	[illegible]	---	[illegible]	---	---
13	---	---	0.17	---	---	---	---	[illegible]	---	[illegible]	---	---
14	---	---	[illegible]	---	---	---	---	[illegible]	---	[illegible]	---	---
15	---	---	[illegible]	---	---	---	---	[illegible]	---	[illegible]	---	---
16	---	---	[illegible]	---	---	---	---	[illegible]	[illegible]	[illegible]	---	---
17	---	---	[illegible]	---	---	---	---	[illegible]	[illegible]	[illegible]	---	---
18	[illegible]	---	[illegible]	---	---	---	---	[illegible]	---	[illegible]	---	---
19	[illegible]	---	[illegible]	---	---	---	---	[illegible]	---	[illegible]	---	---
20	[illegible]	---	[illegible]	---	---	---	---	[illegible]	---	[illegible]	---	---
21	[illegible]	---	[illegible]	---	---	---	---	[illegible]	---	[illegible]	---	---
22	[illegible]	---	[illegible]	---	---	---	---	---	---	---	---	---
23	[illegible]	---	[illegible]	---	---	---	---	---	---	---	---	---
24	[illegible]	---	[illegible]	---	---	---	---	---	---	---	---	---
25	[illegible]	---	[illegible]	---	---	---	---	---	---	---	---	---
26	[illegible]	---	[illegible]	---	---	---	---	---	---	---	---	---
27	[illegible]	---	[illegible]	---	---	---	---	---	---	---	---	---
28	---	---	[illegible]	---	---	---	---	---	---	---	---	---
29	---	---	[illegible]	---	---	---	---	---	---	---	---	---
30	---	---	[illegible]	---	---	---	---	---	---	---	---	---
31	---	---	[illegible]	---	---	---	---	---	---	---	---	---
MONTH	---	---	[illegible]	---	---	---	---	---	---	---	---	---

07324300 FOSS RESERVOIR NEAR FOSS, OKLA.

LOCATION.--Lat 35°32'18", long 99°10'40", in S1 sec.2, T.12 N., R.19 W., Custer County, near outlet works at dam on Washita River, 0.5 mi (0.8 km) upstream from Oak Creek, 3.5 mi (5.6 km) west of Stafford, 6.0 mi (9.6 km) north of Foss, and at mile 474.4 (763.3 km).

DRAINAGE AREA.--1,496 sq mi (3,874.6 km²).

PERIOD OF RECORD.--Chemical analyses: May 1963 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	RESER-VOIR STORAGE (AC-FT)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)
OCT.									
21...	102100	200	140	98	142	0	1100	50	.00
NOV.									
18...	101600	210	140	100	144	0	1100	50	.05
DEC.									
20...	101200	220	140	97	146	0	1100	49	.02
JAN.									
10...	101000	200	160	100	148	0	1100	52	.02
MAR.									
13...	100100	220	140	100	158	0	1100	50	.05
24...	99500	220	140	100	158	0	1100	49	.05
APR.									
13...	98400	230	150	100	160	0	1100	50	.02
MAY									
08...	97600	230	150	100	164	0	1100	51	.09
JUNE									
05...	98200	220	150	100	158	0	1200	50	.05
JULY									
25...	95400	230	140	100	140	0	1200	42	.07
AUG.									
18...	93500	220	160	110	142	0	1200	53	.14
SEP.									
28...	91600	230	150	110	138	0	1200	54	.02

DATE	DIS-SOLVED NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.									
21...	.00	.00	1810	2.46	1100	980	1.3	2110	7.8
NOV.									
18...	.22	.07	1820	2.48	1100	980	1.3	2090	8.2
DEC.									
20...	.09	.02	1850	2.52	1100	980	1.3	2120	8.0
JAN.									
10...	.09	.03	1860	2.53	1100	980	1.3	2110	8.3
MAR.									
13...	.22	.05	1890	2.57	1200	1100	1.3	2150	8.2
24...	.22	.04	1850	2.52	1200	1100	1.3	2160	8.1
APR.									
13...	.09	.01	1880	2.56	1200	1100	1.3	2160	7.6
MAY									
08...	.40	.04	1930	2.62	1200	1100	1.3	2180	7.9
JUNE									
05...	.22	.03	1950	2.65	1200	1100	1.3	2170	8.2
JULY									
25...	.31	.03	1970	2.68	1200	1100	1.3	2150	7.9
AUG.									
18...	.62	.04	1920	2.62	1200	1100	1.4	2190	8.0
SEP.									
28...	.09	.00	1900	2.59	1200	1100	1.4	2060	8.1

07324400 WASHITA RIVER NEAR FOSS, OKLA.

LOCATION.--Lat 35°32'20", long 99°19'10", in SW1/4SW1/4 sec. 1, T.12 N., R.19 W., Custer County, at gaging station at county road bridge, 0.4 mi (0.6 km) downstream from Oak Creek, 0.9 mi (1.4 km) downstream from Foss Dam, 2.5 mi (4.0 km) west of Stafford, 6.0 mi (9.6 km) north of Foss, and at mile 743.5 (1,196.3 km).

DRAINAGE AREA.--1,551 sq mi (4,017.1 km²).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
OCT.								
05...	1.6	45	304	0	320	14	.10	830
15...	1.6	49	394	0	370	14	.90	952
25...	2.9	40	394	0	240	12	2.0	739
NOV.								
05...	7.8	26	264	4	100	9.5	.00	407
15...	4.9	40	400	0	180	12	.80	673
25...	4.9	37	390	0	160	11	1.6	643
DEC.								
05...	6.1	40	264	4	170	12	.30	616
15...	18	28	336	0	48	10	3.1	354
25...	6.9	40	200	4	180	13	.80	415
JAN.								
05...	5.8	43	374	0	210	14	1.2	631
15...	3.8	43	370	0	210	14	.80	586
25...	5.0	44	394	0	230	12	.80	658
FEB.								
05...	4.2	44	398	0	220	12	1.2	686
15...	4.0	45	402	0	240	14	1.5	703
25...	4.0	46	398	0	250	12	1.5	723
MAR.								
05...	3.8	47	340	0	290	14	.00	738
15...	3.3	46	416	0	280	23	.80	792
25...	3.2	47	382	0	350	24	.90	814
APR.								
05...	3.5	50	420	0	340	13	.70	846
15...	2.8	52	444	0	370	14	1.2	918
25...	1.7	52	442	0	420	14	1.5	948
MAY								
05...	4.8	39	226	4	280	12	.20	593
15...	31	23	244	0	53	17	2.9	291
25...	13	23	236	0	72	12	3.0	315
JUNE								
05...	8.4	30	304	0	95	13	2.3	411
15...	51	20	200	0	24	9.0	3.1	240
25...	8.8	29	296	0	98	12	2.3	419
JULY								
05...	14	23	250	4	160	10	3.0	404
15...	6.5	36	312	0	290	11	1.5	506
25...	65	18	114	0	25	9.0	1.4	260
AUG.								
05...	18	93	60	0	1100	40	.80	1840
15...	20	98	66	0	1100	40	1.0	1850
25...	5.0	51	94	0	400	19	1.7	900
SEP.								
05...	0.5	65	[illegible]	0	310	14	1.7	807
15...	.07	55	[illegible]	0	590	17	.80	1260
25...	.08	53	[illegible]	0	540	16	1.1	1100

07324400 WASHITA RIVER NEAR FOSS, OKLA.

PERIOD OF RECORD.--Chemical analyses: October 1946 to September 1948, water years 1950-1951 and 1956 (partial-record station), October 1969 to current year.
Water temperatures: October 1946 to September 1948, October 1969 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.							
05...	1.13	3.58	520	270	.9	1080	8.1
15...	1.29	4.11	620	300	.9	1210	8.1
25...	1.01	5.79	520	200	.8	1010	8.3
NOV.							
05...	.55	8.57	290	67	.7	611	8.5
15...	.92	8.90	460	130	.8	912	8.2
25...	.87	8.51	440	120	.8	876	8.3
DEC.							
05...	.84	10.1	340	120	.9	855	8.4
15...	.48	17.2	280	4	.7	588	7.8
25...	.56	7.73	280	110	1.0	653	8.5
JAN.							
05...	.86	9.88	460	150	.9	916	8.0
15...	.80	6.01	440	140	.9	897	8.2
25...	.89	5.88	480	160	.9	949	8.3
FEB.							
05...	.93	7.78	480	150	.9	981	8.1
15...	.96	7.59	510	180	.9	1020	8.2
25...	.98	7.81	520	190	.9	1030	8.2
MAR.							
05...	1.00	7.57	500	220	.9	1020	8.2
15...	1.08	7.06	560	220	.8	1080	8.1
25...	1.11	7.03	580	270	.8	1100	8.1
APR.							
05...	1.15	8.68	590	250	.9	1160	8.2
15...	1.25	6.94	650	290	.9	1230	8.1
25...	1.29	6.35	690	330	.9	1260	8.2
MAY							
05...	.81	7.68	400	210	.8	940	8.4
15...	.40	24.6	220	20	.7	696	8.0
25...	.63	11.1	240	44	.6	518	8.2
JUNE							
05...	.56	9.32	300	67	.8	658	8.3
15...	.33	33.0	170	0	.7	390	8.6
25...	.57	9.96	300	67	.7	656	8.5
JULY							
05...	.60	18.6	360	130	.6	690	8.5
15...	.69	6.15	330	160	.6	718	8.2
25...	.35	31.6	170	0	.6	393	7.3
AUG.							
05...	2.50	170	1100	960	1.2	2060	7.8
16...	2.52	170	1100	960	1.2	2070	7.8
25...	1.72	14.1	610	320	.9	1200	8.1
SEP.							
05...	1.1'	5.72	600	270	.8	1130	8.1
15...	1.7,	3.30	860	550	.8	1520	8.1
25...	1.60	2.17	820	400	.8	1000	8.1

07324400 WASHITA RIVER NEAR FOSS, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1190	443	963	920	991	1030	1140	777	637	804	1700	1270
2	1160	547	974	871	991	1070	1140	922	638	---	1810	832
3	1160	618	983	920	1020	1120	1130	1040	640	273	1770	1060
4	1160	660	906	991	1020	1120	1170	1080	653	692	2040	1120
5	1170	693	902	916	1000	1120	1170	940	653	694	2050	1130
6	1190	828	970	940	1010	1120	1220	1140	653	859	1980	1250
7	1200	830	932	940	1000	1120	1150	1140	656	939	1980	1240
8	1210	830	967	956	1030	1100	1190	1150	644	---	2000	1330
9	1200	830	941	959	1060	1110	1190	1140	657	---	2020	1190
10	1210	872	884	958	1060	1110	1190	1150	674	354	2060	1180
11	1210	898	879	953	1060	1120	1190	1140	660	418	2060	1190
12	1210	909	899	969	1060	1080	1190	269	657	525	2060	1340
13	1220	934	899	977	1070	1080	1170	469	662	621	---	1410
14	1240	932	906	956	1070	1100	1240	470	393	694	2050	1480
15	1240	931	591	897	1050	1090	1240	490	396	718	---	1520
16	244	947	766	1010	1070	1100	1210	551	450	886	1740	1520
17	---	865	765	997	1040	1120	1200	589	557	883	1620	1570
18	---	868	869	992	1040	1120	1260	637	566	687	1640	1680
19	516	950	869	990	1080	1080	1280	664	564	374	2160	1680
20	821	897	869	1020	1070	1090	1260	685	597	372	2150	1720
21	708	895	847	1020	1080	1080	1280	684	624	361	2140	1170
22	785	897	---	1020	1070	1130	1370	684	635	374	2060	1400
23	1010	902	870	1010	1090	1130	1370	682	648	379	2050	1470
24	1010	974	896	1020	1050	1150	1370	631	652	352	1570	1470
25	1010	977	653	949	1050	1120	1290	517	653	387	1190	1490
26	1040	933	896	1020	1060	1110	1290	516	669	430	1130	1640
27	567	877	896	1120	1100	1140	1320	---	646	490	1180	1620
28	915	966	870	1110	1100	1150	1200	---	666	492	1180	1670
29	189	963	923	996	1090	1140	1200	538	666	510	1060	1670
30	270	994	906	1030	---	1110	---	547	648	669	1180	1610
31	484	---	900	1020	---	1140	---	598	---	712	1270	---
MONTH	948	855	883	982	1050	1110	1230	753	615	569	1700	1380

07324400 WASHITA RIVER NEAR FOSS, OKLA.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.5	15.0	4.5	6.0	1.0	5.0	11.0	20.0	21.0	24.5	25.0	22.0
2	19.5	11.0	4.0	5.5	0.5	7.0	11.0	13.0	21.0	---	24.0	19.0
3	17.0	9.0	2.0	0.5	0.0	6.0	11.0	13.0	21.0	21.0	24.0	18.0
4	15.0	9.5	3.5	0.5	0.0	6.0	10.0	15.0	21.0	19.0	24.0	19.0
5	15.0	13.0	4.5	0.5	0.0	6.0	10.0	16.0	24.0	19.0	24.0	20.0
6	15.5	9.0	4.0	0.0	0.0	6.0	14.0	16.0	22.0	20.0	24.0	20.0
7	15.5	7.0	5.0	0.0	0.5	9.5	15.0	15.0	22.0	20.5	24.0	22.0
8	16.5	7.5	5.0	1.0	1.0	6.0	15.0	15.0	26.0	---	24.0	23.0
9	14.0	8.0	4.0	4.0	1.0	6.0	15.0	15.0	22.5	---	24.0	23.0
10	13.5	8.0	4.5	6.0	4.0	9.0	15.5	15.5	22.0	22.0	24.0	23.0
11	12.5	9.0	4.5	6.0	5.0	10.0	18.5	15.0	22.0	22.0	24.0	23.0
12	14.0	8.0	4.5	4.0	6.0	11.0	18.0	15.0	23.0	22.5	25.0	22.0
13	15.0	9.0	14.0	3.5	6.0	17.0	21.0	15.0	23.0	23.0	25.0	22.0
14	17.0	11.0	7.0	0.0	6.0	16.5	21.0	15.0	25.5	23.0	25.0	22.0
15	17.0	14.0	5.0	0.0	5.5	11.0	12.0	17.0	25.0	23.0	25.0	24.0
16	17.0	15.0	5.0	0.0	4.5	11.0	14.0	21.0	25.5	23.0	25.0	23.0
17	---	15.0	4.0	0.0	6.0	11.0	14.5	20.0	25.0	23.0	24.0	25.0
18	---	11.0	4.0	3.0	8.0	11.0	16.0	20.0	25.0	23.0	25.0	23.0
19	14.5	9.0	4.0	4.0	6.5	13.0	21.0	22.0	26.0	25.0	24.0	23.0
20	14.5	9.0	4.0	5.0	6.5	16.0	16.0	21.0	27.0	23.0	24.0	22.0
21	13.0	11.0	4.0	5.0	8.0	10.0	13.5	21.0	25.0	23.0	24.0	18.0
22	13.5	7.0	---	5.0	6.5	17.5	13.0	22.0	25.5	26.0	27.0	15.0
23	13.5	6.0	4.0	5.5	11.5	13.5	13.5	20.0	23.0	24.0	27.0	16.0
24	13.5	6.0	5.0	6.0	11.0	11.5	13.5	22.0	25.0	25.0	25.0	18.0
25	13.5	6.0	8.0	3.5	9.5	15.0	12.5	22.0	25.0	25.0	20.0	20.0
26	16.0	8.1	1.0	3.0	8.0	17.0	12.5	22.0	25.0	23.0	21.0	19.5
27	13.5	7.0	11.0	0.0	0.0	11.5	12.0	---	25.0	23.5	21.0	21.0
28	13.0	6.5	6.0	0.0	8.0	11.0	13.0	---	20.5	23.0	21.0	20.0
29	9.0	6.0	7.5	1.0	11.5	6.0	13.0	20.0	20.0	23.0	24.0	21.0
30	13.0	5.0	6.0	1.0	---	7.5	---	18.0	20.0	22.0	21.0	15.1
31	14.0	---	8.5	1.0	---	11.0	---	18.0	---	23.0	22.0	---
MONTH	15.0	9.0	5.5	2.5	5.0	11.0	14.5	18.0	24.0	23.0	24.0	20.5

07325500 WASHITA RIVER AT CARNEGIE, OKLA.

LOCATION.--Lat 35°07'02", long 98°33'49", in NW1/4NW1/4 sec.3, T.7 N., R.13 W., Caddo County, at gaging station at bridge on State Highway 9, 1,300 ft (396.2 m) upstream from Running Creek, 2.7 mi (4.3 km) east of Carnegie, and at mile 353.9 (569.4 km).

DRAINAGE AREA.--3,129 sq mi (8,104.1 km²), includes that of Running Creek.

PERIOD OF RECORD.--Chemical analyses: Water years 1948-53 (partial-record station), October 1953 to current year.
Water temperatures: October 1953 to current year.
Sediment records: May 1947 to September 1950.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-CHARGE (CFS)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
OCT.								
01-02	78	29	48	8	190	26	.10	376
03...	1360	9.1	184	0	110	6.3	.10	353
04-05	403	18	124	0	180	18	3.6	407
06-13	76	38	158	0	340	39	2.3	688
14-20	39	77	160	6	550	91	.10	1130
21-22	98	170	172	4	940	200	.40	1910
23-29	75	57	190	4	510	57	4.5	1050
30...	2020	10	148	0	300	7.1	.10	606
31...	2340	10	152	0	100	9.0	7.1	316
NOV.								
01-03	579	16	102	12	170	14	.50	379
04-07	174	24	138	2	250	21	2.5	523
08-13	83	42	202	4	410	38	2.6	852
14-20	58	71	292	0	640	73	2.0	1360
21...	52	54	192	12	450	56	4.3	962
22-30	57	96	300	12	790	99	.10	1570
DEC.								
01-14	65	100	244	16	800	98	.20	1630
15-18	812	23	134	0	120	30	6.2	386
19-21	252	32	142	0	210	38	2.0	526
22-25	121	58	198	12	430	54	2.2	988
26-31	86	89	276	8	650	88	.90	1440
JAN.								
01-10	68	110	322	6	820	110	3.3	1650
11-20	64	110	228	0	860	110	5.1	1620
21-31	60	110	332	0	890	110	4.2	1770
FEB.								
01-10	59	120	260	0	920	120	3.6	1800
11-20	57	120	316	0	920	120	4.2	1820
21-29	52	120	302	0	960	120	7.9	1930
MAR.								
01-10	49	130	284	0	960	140	.80	1900
11-20	44	130	264	0	1000	140	.10	1940
21-31	33	120	264	0	960	120	.20	1880
APR.								
01-10	27	130	292	0	900	130	1.4	1820
11-20	25	130	306	0	880	130	1.9	1780
21-26	23	140	304	0	910	150	2.6	1870
27...	145	37	172	0	250	38	.10	607
28-30	731	28	120	0	140	29	1.1	349
MAY								
01-02	950	32	126	0	240	34	1.2	537
03-13	173	52	182	0	420	53	3.9	882
14-15	1080	18	134	0	170	18	1.5	394
16-19	188	30	170	0	260	24	3.2	582
20-28	59	46	222	0	470	39	3.0	962
29-31	338	23	120	0	300	22	2.9	576
JUNE								
01...	103	25	112	8	270	20	.50	551
02-05	64	50	222	0	460	45	3.1	997
06-13	35	95	222	0	650	100	1.6	1360
14...	520	58	180	0	360	68	.00	843
15-16	1190	21	120	0	210	18	1.9	470
17-20	236	22	170	0	170	14	2.5	432
21-26	71	41	236	0	310	32	3.0	741
27-30	48	65	232	0	450	66	2.3	1040
JULY								
01-05	50	85	212	0	590	92	.90	1200
06-08	65	46	194	0	400	38	4.1	822
09-10	380	32	172	0	260	28	4.3	566
11-12	331	58	188	0	360	64	2.3	786
13-16	98	26	172	0	160	18	3.4	415
17-23	27	57	238	0	280	53	3.0	694
24-31	12	81	238	0	490	93	2.2	1130
AUG.								
01-10	8.7	63	242	0	400	62	1.4	932
11...	41	200	250	0	820	250	3.5	1720
12...	19	48	120	0	160	60	4.2	436
13-15	9.9	49	158	0	200	58	3.2	542
16-22	9.3	74	188	0	460	74	3.9	980
23-26	23	140	184	0	860	140	5.2	1750
27-31	24	110	172	4	720	95	3.6	1380

07325500 WASHITA RIVER AT CARNEGIE, OKLA.

EXTREMES, Current year.--Dissolved solids: Maximum, 1,940 mg/l Feb. 21-29, Mar. 11-20; minimum, 316 mg/l Oct. 31.
Hardness: Maximum, 1,200 mg/l Feb. 21-29, Mar. 11-20; minimum, 210 Oct. 1-2.
Specific conductance: Maximum daily, 2,400 micromhos Feb. 3; minimum daily 457 micromhos Dec. 17.
Water temperatures: Maximum 35.0°C Sept. 2; minimum, freezing point Jan. 1, 5, 15.

Period of record.--Dissolved solids: Maximum, 2,460 mg/l May 9-10, 1956; minimum, 129 mg/l Sept. 24-25, 1971.
Hardness: Maximum, 1,480 mg/l May 9-10, 1956; minimum, 86 mg/l Sept. 24-25, 1971.
Specific conductance: Maximum daily, 3,530 micromhos Aug. 26, 1954; minimum daily, 197 micromhos Sept. 25, 1971.
Water temperatures: Maximum, 35.0°C Sept. 2, 1972; minimum, freezing point on many days during winter period.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.							
01-02	.51	79.2	210	160	.9	554	9.1
03...	.48	1300	250	99	.3	510	7.7
04-05	.55	443	270	170	.5	593	8.0
06-13	.94	141	440	310	.8	942	8.1
14-20	1.54	119	660	530	1.3	1440	8.5
21-22	2.60	505	1000	850	2.3	2280	8.4
23-29	1.43	213	630	470	1.0	1300	8.4
30...	.82	3310	400	260	.2	768	7.7
31...	.43	2000	220	95	.3	468	7.8
NOV.							
01-03	.52	592	270	170	.4	561	8.7
04-07	.71	246	350	230	.6	733	8.4
08-13	1.16	191	550	380	.8	1100	8.4
14-20	1.85	213	850	610	1.1	1630	8.3
21...	1.31	135	600	420	1.0	1220	8.6
22-30	2.14	242	1000	730	1.3	1910	8.5
DEC.							
01-14	2.22	286	1000	770	1.4	1900	8.6
15-18	.52	846	220	110	.7	529	7.5
19-21	.72	358	320	200	.8	710	8.3
22-25	1.34	323	590	410	1.0	1210	8.6
26-31	1.96	334	880	640	1.3	1680	8.6
JAN.							
01-10	2.24	303	1100	830	1.4	2000	8.4
11-20	2.20	280	1000	810	1.5	1970	8.2
21-31	2.41	287	1100	830	1.4	2080	8.2
FEB.							
01-10	2.45	287	1100	890	1.6	2140	8.3
11-20	2.48	280	1100	840	1.6	2100	8.2
21-29	2.64	271	1200	950	1.5	2220	7.8
MAR.							
01-10	2.58	251	1100	870	1.7	2220	8.2
11-20	2.64	230	1200	980	1.6	2220	8.3
21-31	2.56	168	1100	880	1.6	2150	8.1
APR.							
01-10	2.48	133	1100	860	1.7	2170	8.0
11-20	2.42	120	1100	850	1.7	2130	8.0
21-26	2.54	116	1100	850	1.8	2280	7.9
27...	.83	238	380	240	.8	858	7.4
28-30	.47	689	220	120	.8	569	8.1
MAY							
01-02	.73	1380	320	220	.8	735	8.3
03-13	1.20	412	540	390	1.0	1150	7.9
14-15	.54	1150	260	150	.5	578	7.9
16-19	.79	295	370	230	.7	798	8.3
20-28	1.31	153	620	440	.8	1210	8.2
29-31	.78	526	380	280	.5	794	8.2
JUNE							
01...	.75	153	360	260	.6	790	8.7
02-05	1.36	172	640	460	.9	1280	8.1
06-13	1.85	129	830	650	1.4	1720	8.0
14...	1.15	1160	520	370	1.1	1120	7.6
15-16	.64	1510	300	200	.5	673	7.6
17-20	.59	275	290	150	.6	640	8.3
21-26	1.01	142	480	290	.8	1000	8.2
27-30	1.41	135	640	450	1.1	1350	8.1
JULY							
01-05	1.63	162	720	550	1.4	1560	7.9
06-08	1.12	144	530	370	.9	1110	7.5
09-10	.77	581	380	240	.7	822	7.7
11-12	1.07	702	480	330	1.2	1100	7.5
13-16	.56	110	270	130	.7	626	7.7
17-23	.94	50.6	440	250	1.2	1010	6.8
24-31	1.54	36.6	670	480	1.4	1480	7.8
AUG.							
01-10	1.27	21.9	580	380	1.1	1260	8.1
11...	2.34	190	940	740	2.8	2300	7.2
12...	.59	22.4	240	140	1.3	694	6.9
13-15	.74	14.5	310	180	1.2	816	7.7
16-22	1.33	24.6	580	430	1.3	1320	6.9
23-26	2.38	109	980	830	1.9	2120	6.9
27-31	1.88	89.4	800	650	1.7	1730	8.4

07325500 WASHITA RIVER AT CARNEGIE, OKLA.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-CHARGE (CFS)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
SEP.								
01-03	68	100	194	0	790	88	1.5	1510
04-05	406	16	92	0	210	17	5.0	420
06-10	97	29	126	0	380	25	5.2	718
11...	159	9.4	92	0	270	8.3	6.7	511
12-14	41	16	96	0	350	16	4.1	644
15-20	23	46	168	2	540	48	2.4	1040
21-30	21	110	196	0	690	130	2.2	1430
WTD. AVG.	--	45	174	2	365	46	2.7	782
TIME WTD. AVG.	122	81	225	2	609	82	2.6	1250
TOT. LOAD (TONS)	--	5440	20900	141	43900	5470	327	93900

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	613	486	2020	1920	2390	2210	2180	680	794	1480	1390	1830
2	697	624	2020	1970	2390	2200	2140	801	1020	1460	1390	1620
3	510	624	2060	---	2400	2200	2140	1040	1230	1460	1370	2040
4	554	676	2060	2040	2200	2250	2210	1040	1360	1580	1340	613
5	604	708	2080	2040	2200	2290	2180	927	1360	1750	1160	604
6	868	762	2100	1970	2190	2370	2190	1050	1550	1250	1150	811
7	868	840	2100	---	2160	2300	2220	1080	1610	881	1170	811
8	872	1040	2100	---	2220	2310	2220	1080	1640	1150	1160	1000
9	1000	1040	1870	2260	2200	2300	2200	1210	1720	766	1230	1000
10	997	1040	1950	2180	2160	2280	2280	1310	1800	858	1230	1110
11	997	1090	1950	2120	2160	2300	2270	1410	1800	965	2300	688
12	1070	1250	1960	2120	2170	2300	2160	1360	1840	1230	694	744
13	1170	1240	1940	2010	2170	2290	2090	1630	1800	550	725	821
14	1310	1540	1930	2010	2170	2300	2090	636	1120	592	869	964
15	1350	1480	---	2100	2190	2310	2060	530	744	655	871	1050
16	1410	1550	608	2040	2170	2280	2060	703	604	654	1030	1110
17	1530	1690	457	2110	2230	2280	2150	740	513	927	1040	1360
18	1700	1720	529	2140	2220	2290	2220	865	548	930	1030	1360
19	1680	1800	670	2160	2200	2280	2180	918	752	915	1280	1450
20	---	1810	700	2240	2200	2290	2170	1080	750	981	1520	1500
21	2240	1240	782	2160	2200	2300	2250	1080	838	1070	1660	---
22	2450	1870	1090	2180	2230	2310	2330	1140	931	1140	1660	1640
23	1610	1900	1090	2080	2230	2310	2320	1200	1050	1280	1980	1660
24	1190	1960	1300	2060	2230	2180	2320	1250	1040	1420	2160	---
25	1160	1990	1430	2070	2270	2180	2280	1130	---	1520	2160	2020
26	1160	2030	1570	2090	2270	2280	2290	1130	[illegible]	1570	2160	2060
27	1150	2030	1700	2130	2270	2210	858	1440	1200	1520	2020	2040
28	1460	2040	1700	2150	2360	2230	557	1440	1330	1470	1740	1840
29	1490	2040	---	---	2260	2180	564	---	1440	1380	1550	1580
30	768	2060	---	2160	---	2170	599	732	1470	1380	1570	1570
31	468	---	1910	2160	---	2180	---	864	---	1380	1770	---
MONTH	1160	1410	1560	2100	2230	2260	1990	1050	1200	1170	1430	1320

07325500 WASHITA RIVER AT CARNEGIE, OKLA.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
SEP.							
01-03	2.05	277	880	720	--	1820	8.0
04-05	.57	460	280	210	--	609	7.4
06-10	.96	188	470	370	--	953	7.8
11...	.69	219	360	290	--	688	7.8
12-14	.88	71.3	420	340	--	842	7.9
15-20	1.41	64.6	660	520	--	1300	8.4
21-30	1.94	81.1	820	660	1.7	1800	7.8
WTD. AVG.	1.06	--	489	344	.8	1010	8.0
TIME WTD. AVG.	1.70	--	766	577	1.3	1540	8.1
TOT. LOAD (TONS)	--	--	--	--	--	--	--

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.0	15.0	8.0	8.0	6.0	12.0	13.5	17.0	22.0	27.5	29.0	29.0
2	26.0	14.0	9.0	7.0	5.0	5.0	13.0	19.0	21.5	29.0	31.0	35.0
3	20.0	12.0	5.0	---	3.0	7.0	13.0	19.0	23.0	27.0	26.0	28.0
4	21.0	12.0	7.0	1.0	4.0	9.0	10.0	18.0	23.0	24.0	26.0	25.0
5	18.0	12.0	6.0	0.0	4.0	10.0	13.0	20.0	23.0	23.5	26.0	27.0
6	20.0	12.0	6.0	1.0	5.0	9.5	17.0	22.0	24.0	25.0	26.0	27.0
7	20.0	10.0	7.0	---	4.0	10.0	12.0	17.0	27.0	27.0	25.0	26.0
8	20.0	10.0	6.0	---	4.0	9.0	9.0	18.0	27.0	25.0	24.5	26.0
9	17.0	12.0	7.0	6.0	4.0	10.0	15.0	18.0	25.0	26.0	25.5	26.0
10	14.0	14.0	6.0	7.0	6.0	12.0	22.0	18.0	25.5	26.0	26.0	27.0
11	16.0	10.0	7.0	6.0	2.0	13.0	23.0	24.0	25.0	25.0	25.0	27.0
12	16.0	12.0	7.0	6.0	5.0	13.0	24.0	23.0	25.0	27.0	28.0	27.0
13	17.0	12.0	7.0	4.0	6.0	10.0	26.0	20.0	25.0	28.0	28.0	25.0
14	19.0	12.5	9.0	7.0	9.0	14.0	26.0	18.0	24.5	25.0	26.0	26.0
15	18.5	12.5	---	0.0	6.0	15.0	12.0	18.0	26.0	27.5	26.0	26.5
16	20.0	15.0	9.0	4.0	7.0	14.0	18.0	20.5	26.0	27.5	25.5	27.0
17	20.0	15.0	7.0	7.0	3.0	15.0	18.0	21.5	22.0	26.0	26.0	27.0
18	18.5	12.0	6.0	6.0	5.0	14.5	20.0	22.0	26.0	25.0	26.5	27.0
19	17.0	12.0	7.0	5.0	7.0	15.0	19.0	24.0	27.0	25.0	30.0	28.0
20	---	13.0	7.0	6.0	7.0	15.0	20.0	22.0	28.0	26.0	29.0	27.0
21	16.5	15.0	6.0	7.0	7.0	15.0	18.0	23.0	24.5	26.0	29.0	21.0
22	17.0	10.0	7.0	7.0	7.0	14.5	20.0	24.5	28.0	31.0	27.0	24.0
23	18.0	12.0	7.0	7.5	8.0	16.0	19.5	24.0	25.0	29.0	25.0	20.0
24	17.0	9.0	7.0	7.0	10.0	13.0	20.0	23.0	26.0	26.0	27.0	24.0
25	18.0	12.0	8.0	6.0	8.0	12.0	20.0	23.0	---	26.0	27.0	22.0
26	17.0	12.0	7.0	7.0	9.0	18.0	20.0	23.5	27.0	27.0	25.0	26.0
27	15.0	9.0	13.0	2.0	9.0	15.0	15.0	26.0	28.0	28.0	25.0	26.0
28	17.0	9.0	11.0	4.0	14.0	13.0	19.0	25.5	28.0	26.5	23.5	27.0
29	15.0	10.0	---	---	15.0	8.0	20.0	---	26.0	25.0	24.0	25.0
30	15.0	7.0	---	3.0	---	12.0	18.0	20.0	27.0	25.5	24.0	17.0
31	15.0	---	7.0	4.0	---	13.0	---	20.0	---	25.0	29.0	---
MONTH	18.0	12.0	7.5	5.0	6.5	12.5	18.0	21.0	25.5	26.5	26.5	26.0

07331000 WASHITA RIVER NEAR DURWOOD, OKLA.

LOCATION.--Lat 34°14'03", long 96°58'32", in NW1/4SW1/4 sec.3, T.4 S., R.3 E., Carter County, at gaging station at bridge on U.S. Highway 177, 1.3 mi (2.1 km) downstream from Caddo Creek, 4.0 mi (6.4 km) north of Durwood, and at mile 63.4 (102.0 km).

DRAINAGE AREA.--7,202 sq mi (18,653.2 km²).

PERIOD OF RECORD.--Chemical analyses: May 1944 to current year.
Water temperatures: April 1947 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-CHARGE (CFS)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
OCT.								
01-08	1770	14	0	26	74	15	.10	200
09-19	388	26	152	0	160	34	2.2	450
20-24	1720	22	156	0	50	25	.10	277
25-30	355	35	220	0	110	45	1.8	432
31...	266	50	256	0	180	65	1.3	600
NOV.								
01-03	236	52	254	4	210	67	.10	640
04...	1160	78	232	0	430	100	2.9	1020
05...	982	23	192	0	180	23	8.2	479
06-11	470	22	144	0	140	26	4.3	380
12-19	297	34	192	0	180	42	2.7	503
20-30	212	51	272	0	240	64	1.4	694
DEC.								
01-08	409	52	196	0	220	65	.30	602
09...	1340	39	224	0	150	49	1.4	516
10-11	6020	19	164	0	34	26	.20	252
12-19	2310	30	178	0	62	45	1.6	327
20-21	1520	48	184	4	250	75	.40	597
22-31	703	37	212	0	130	48	2.4	488
JAN.								
01-10	502	48	226	10	160	65	2.6	541
11-20	309	66	332	0	280	87	3.2	842
21-31	281	76	340	0	360	87	2.8	1000
FEB.								
01-10	305	73	316	0	300	97	1.9	866
11-20	282	82	320	0	340	110	1.9	980
21-29	237	82	310	0	370	110	1.7	1000
MAR.								
01-10	248	80	296	0	360	110	1.5	965
11-20	184	90	314	0	400	120	1.9	1090
21-31	165	100	310	0	380	130	1.9	1040
APR.								
01-10	129	94	318	0	340	110	1.1	960
11-20	124	98	314	0	300	120	1.5	932
21...	694	83	220	0	120	140	.10	617
22-27	490	42	198	0	88	54	3.3	394
28...	941	32	154	0	41	44	3.9	269
29...	1190	52	244	0	160	70	.50	557
30...	1150	36	206	0	88	49	3.6	389
MAY								
01-03	1650	36	172	0	140	48	3.2	442
04...	974	28	170	0	70	42	2.2	317
05-11	861	34	168	0	120	44	5.0	360
12-14	3780	23	146	0	44	32	1.7	240
15-18	1980	25	176	0	65	42	2.8	313
19-21	983	42	182	0	230	55	4.5	581
22-29	426	37	200	0	150	48	4.2	480
30-31	1630	28	134	0	49	39	2.5	271
JUNE								
01-04	509	40	174	8	130	58	.10	437
05-12	271	52	194	0	270	66	.80	664
15-23	232	57	220	0	260	77	1.8	692
24-29	188	36	164	0	210	41	4.0	530
30...	651	27	160	0	100	27	2.8	324
JULY								
01-03	218	26	134	0	59	31	2.2	265
04...	795	65	188	0	98	120	1.3	496
05-08	304	30	154	0	67	41	2.5	312
09-16	98	48	246	0	120	56	1.0	471
17-21	70	70	244	0	190	94	1.4	642
22...	62	80	90	0	340	97	1.6	738
23-31	29	70	204	0	330	79	1.3	792
AUG.								
01-10	11	61	246	0	200	74	1.0	663
11-20	15	56	248	0	140	68	1.7	531
21-31	12	64	240	0	100	89	1.2	498
SEP.								
01-10	17	51	238	0	84	67	1.1	429
11-13	55	62	216	0	88	89	1.0	461
14-23	44	89	144	0	340	100	4.4	830
24-28	72	54	166	0	190	68	2.5	536
29-30	62	36	138	0	69	46	4.1	302
WTD. AVG.	--	38	184	3	140	51	1.9	460
TIME WTD. AVG.	479	56	229	1	212	72	2.0	636
TOT. LOAD (TONS)	--	18100	86600	1210	65800	24100	888	217000

07331000 WASHITA RIVER NEAR DURWOOD, OKLA.

EXTREMES, Current year.--Dissolved solids: Maximum, 1[illegible] mg/1 Mar. 11-20; minimum 200 mg/1 Oct. 1-8.
Hardness: Maximum 640 mg/1 Mar. 11-20; minimum 120 [illegible]/1 Oct. 1-8.
Specific conductance: Maximum daily, 1,530 micromhos Mar. 12, 14; minimum daily, 314 micromhos Oct. 21.
Water temperatures: Maximum 35.0°C June 28, Aug. 4, 5, 20; minimum, freezing point Feb. 5.

Period of record.--Dissolved solids(1944-49, 1950-72): Maximum, 1,470 mg/1 June 15-17, 1966; minimum, 70 mg/1 Nov. 2, 1951.
Hardness (1944-49, 1950-1972): Maximum, 860 mg/1 June 15-17, 1966; minimum, 41 mg/1 Nov. 2, 1951.
Specific conductance (1947-72): Maximum daily, 2,120 micromhos Nov. 15, 1963; minimum daily, 94.9 micromhos Nov. 2, 1951.
Water temperatures (1947-72): Maximum, 37.0°C July 8, 1964; minimum, freezing point on many days during winter period.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.							
01-08	.27	956	120	77	.6	303	8.4
09-19	.61	471	280	160	.7	638	8.0
20-24	.38	1290	160	32	.8	419	7.9
25-30	.59	414	280	100	.9	662	8.3
31...	.82	431	380	170	1.1	898	8.0
NOV.							
01-03	.87	408	420	210	1.1	954	8.5
04...	1.39	3200	610	420	1.4	1380	7.6
05...	.65	1220	330	170	.6	703	7.6
06-11	.52	482	250	130	.6	577	8.0
12-19	.68	403	330	170	.8	756	8.2
20-30	.94	397	460	240	1.0	1010	8.3
DEC.							
01-08	.82	665	360	200	1.2	882	8.2
09...	.70	1870	330	150	.9	760	8.0
10-11	.34	4100	170	35	.6	389	8.0
12-19	.48	2040	220	74	.9	506	8.1
20-21	.81	2450	410	250	1.0	903	8.4
22-31	.66	926	310	140	.9	703	8.2
JAN.							
01-10	.74	733	350	150	1.1	828	8.6
11-20	1.15	702	540	270	1.2	1200	8.3
21-31	1.36	759	620	340	1.3	1350	8.2
FEB.							
01-10	1.18	713	540	280	1.4	1240	8.3
11-20	1.33	746	590	330	1.5	1340	8.0
21-29	1.36	640	620	370	1.4	1370	8.1
MAR.							
01-10	1.31	646	600	360	1.4	1340	7.8
11-20	1.48	542	640	380	1.5	1450	7.9
21-31	1.41	463	610	360	1.6	1410	7.9
APR.							
01-10	1.31	334	600	340	1.7	1390	8.2
11-20	1.27	312	550	290	1.8	1360	8.0
21...	.84	1160	320	140	2.0	975	7.6
22-27	.54	521	240	78	1.2	643	8.0
28...	.37	683	160	34	1.1	460	7.5
29...	.76	1790	350	150	1.2	871	7.8
30...	.53	1210	250	81	1.0	636	7.8
MAY							
01-03	.60	1970	270	130	1.0	690	7.9
04...	.43	834	220	81	.8	516	7.1
05-11	.49	837	260	120	.9	597	8.2
12-14	.33	2450	160	40	.8	393	6.9
15-18	.43	1670	220	76	.7	503	7.7
19-21	.79	1540	380	230	.9	833	7.7
22-29	.65	552	310	150	.9	718	8.0
30-31	.37	1190	160	50	1.0	461	7.0
JUNE							
01-04	.59	601	280	120	1.0	698	8.6
05-12	.90	486	410	250	1.1	961	7.9
15-23	.94	433	430	250	1.2	1030	8.2
24-29	.72	269	330	200	.9	768	8.1
30...	.44	569	210	79	.8	516	7.7
JULY							
01-03	.36	156	160	50	.9	428	8.0
04...	.67	1070	280	130	1.7	831	7.8
05-08	.42	256	190	64	.9	501	7.7
09-16	.64	125	310	110	1.1	750	8.0
17-21	.87	121	380	180	1.6	989	8.1
22...	1.00	124	380	310	1.8	1100	7.1
23-31	1.08	62.0	470	300	1.4	1140	7.5
AUG.							
01-10	.90	19.7	400	200	1.3	989	8.3
11-20	.72	21.5	320	120	1.4	844	8.3
21-31	.68	16.1	290	93	1.6	842	8.0
SEP.							
01-10	.58	19.7	260	65	1.6	714	8.0
11-13	.63	68.5	260	83	1.7	775	7.5
14-23	1.13	98.6	420	300	1.9	1180	7.2
24-28	.73	104	310	170	1.3	834	7.7
29-30	.41	50.6	170	57	1.3	506	7.5
WTD. AVG.	.63	--	292	137	.9	685	8.1
TIME WTD. AVG.	.87	--	391	202	1.2	931	8.1
TOT. LOAD (TONS)	--	--	--	--	--	--	--

07331000 WASHITA RIVER NEAR DURWOOD, OKLA.--Continued

CHEMICAL ANALYSES OF ADDITIONAL SAMPLES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
OCT.									
13...	367	21	138	0	130	28	.60	2.6	.12
NOV.									
18...	380	25	146	0	140	32	.50	2.3	.10
DEC.									
20...	1740	30	180	0	110	36	.50	2.3	.11
JAN.									
19...	294	66	344	0	280	90	.50	2.2	.36
FEB.									
01...	259	73	336	6	320	97	.20	.70	.36
MAR.									
21...	174	95	318	0	400	120	.10	.40	.36
APR.									
28...	946	27	132	0	19	35	.50	2.0	.22
MAY									
23...	494	32	186	0	130	43	.80	3.5	.10
JUNE									
26...	184	34	160	0	190	41	.90	4.0	--
JULY									
26...	34	79	212	2	360	91	.10	.30	.10
AUG.									
31...	17	58	242	0	91	84	.14	.60	--
SEP.									
26...	25	46	178	0	190	51	.11	.50	--

07331000 WASHITA RIVER NEAR DURWOOD, OKLA.--Continued

CHEMICAL ANALYSES OF ADDITIONAL SAMPLES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.									
13...	.38	375	.51	146	240	127	.6	570	7.9
NOV.									
10...	.32	391	.53	171	250	132	.7	597	7.9
DEC.									
20...	.34	369	.50	1430	250	102	.8	590	8.0
JAN.									
19...	1.1	850	1.16	170	550	268	1.2	1250	8.3
FEB.									
01...	1.1	904	1.23	144	600	318	1.3	1320	8.4
MAR.									
21...	1.1	1030	1.40	484	640	379	1.6	1480	8.3
APR.									
28...	.68	245	.33	308	140	32	1.0	397	7.8
MAY									
23...	.32	437	.59	260	280	127	.8	668	8.2
JUNE									
26...	.20	494	.67	245	300	170	.9	715	8.3
JULY									
26...	.30	854	1.16	73.8	500	323	1.5	1210	8.4
AUG.									
31...	.32	455	.62	20.9	270	71	--	765	8.3
SEP.									
26...	1.0	517	.70	34.9	310	160	1.1	763	8.3

FIELD ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION
OCT.					
13...	560	8.1	21.0	7.9	93
NOV.					
10...	580	--	13.0	8.5	84
DEC.					
20...	580	--	8.0	10.5	94
JAN.					
19...	1400	9.1	10.5	10.8	103
FEB.					
01...	1200	8.5	4.0	13.5	110
MAR.					
21...	1350	8.6	18.0	8.4	93
APR.					
28...	380	8.1	14.5	7.2	74
MAY					
23...	625	8.3	24.0	7.6	95
JUNE					
26...	860	8.2	31.5	6.1	86
JULY					
26...	1100	--	30.0	8.3	112
AUG.					
31...	650	8.1	25.0	7.7	97
SEP.					
26...	740	8.4	27.5	10.3	136

07331000 WASHITA RIVER NEAR DURWOOD, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	377	932	1130	743	1310	1400	1350	780	600	396	997	698
2	391	977	1160	738	1380	1390	1390	578	677	442	994	712
3	416	974	868	774	1390	---	1400	678	790	448	1000	727
4	---	1380	1030	814	1140	1020	1390	516	752	831	1000	724
5	355	783	949	855	1200	1220	1410	---	970	437	1010	621
6	402	530	868	889	1200	1220	1390	865	980	625	1000	749
7	377	556	878	878	---	1420	1390	634	1100	466	991	707
8	448	552	927	962	1210	1460	1440	496	1040	457	988	711
9	604	564	766	1040	1260	1470	---	540	845	586	966	719
10	643	597	405	1060	1370	1480	1440	581	836	686	948	725
11	614	624	381	1060	1260	1500	1410	714	983	712	896	712
12	556	660	415	1060	1380	1530	1400	617	845	735	933	766
13	564	687	467	1200	1390	1520	---	378	892	721	839	835
14	625	728	548	1250	1360	1530	1360	404	929	765	---	1050
15	653	762	527	1300	1340	1280	1350	509	1010	807	818	953
16	691	804	456	1260	1320	1440	1350	491	941	917	---	1050
17	716	832	561	1250	1340	1480	1380	552	969	994	812	1220
18	735	740	559	1280	1400	1500	1400	483	1010	1010	808	1270
19	---	874	610	1280	1390	1500	1410	835	1020	1000	803	1300
20	400	912	962	1330	1370	1500	1220	896	1050	900	803	1420
21	314	898	965	1310	1360	1480	975	783	1130	967	808	1360
22	401	953	721	1290	1400	1460	574	691	1120	1090	844	1090
23	426	1000	651	1340	1400	1460	805	668	914	1100	814	1050
24	502	1000	616	1370	1410	1450	572	694	726	1300	854	896
25	570	---	617	1430	1400	1440	607	714	710	1320	824	815
26	624	1030	652	1420	1410	1410	723	748	718	1180	821	730
27	625	1080	697	1360	1410	1400	611	789	752	1110	821	1070
28	700	1130	774	1340	1410	1420	460	750	848	1070	864	861
29	708	1120	773	1340	1370	1460	871	803	812	997	841	507
30	792	1130	774	1340	---	---	636	450	516	1030	854	504
31	901	---	780	1330	---	1300	---	436	---	1000	819	---
MONTH	556	853	725	1160	1340	1420	1130	622	882	842	889	885

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27.0	22.0	9.0	13.0	7.0	16.0	18.0	21.0	29.0	32.0	28.0	29.0
2	25.0	18.0	11.0	13.0	6.0	10.0	22.0	21.0	30.0	31.0	32.0	30.0
3	22.0	19.0	9.0	9.0	0.0	---	21.0	22.0	30.0	30.0	33.0	28.0
4	---	17.0	9.0	3.0	7.0	15.0	21.0	23.0	30.0	25.0	35.0	24.0
5	20.0	18.0	7.0	2.0	5.0	16.0	23.0	---	30.0	---	35.0	31.0
6	21.0	15.0	9.0	7.0	8.0	18.0	26.0	22.0	32.0	24.0	33.0	31.0
7	23.0	15.0	14.0	5.0	---	21.0	24.0	19.0	32.0	27.0	33.0	32.0
8	20.0	11.0	13.0	13.0	12.0	17.0	24.0	22.0	30.0	26.0	34.0	33.0
9	22.0	15.0	14.0	13.0	12.0	17.0	---	26.0	30.0	31.0	33.0	33.0
10	23.0	16.0	13.0	13.0	13.0	19.0	25.0	20.0	30.0	31.0	28.0	30.0
11	21.0	16.0	15.0	14.0	9.0	16.0	27.0	25.0	30.0	32.0	32.0	32.0
12	24.0	18.0	12.0	13.0	7.0	21.0	30.0	18.0	29.0	31.0	30.0	32.0
13	22.0	20.0	11.0	13.0	9.0	22.0	---	23.0	31.0	32.0	30.0	33.0
14	24.0	22.0	14.0	8.0	11.0	23.0	23.0	23.0	33.0	29.0	---	32.0
15	25.0	19.0	14.0	7.0	15.0	19.0	27.0	24.0	32.0	29.0	34.0	33.0
16	24.0	19.0	11.0	6.0	14.0	17.0	27.0	25.0	28.0	30.0	---	28.0
17	23.0	20.0	11.0	7.0	14.0	22.0	29.0	28.0	30.0	31.0	34.0	33.0
18	22.0	17.0	12.0	11.0	15.0	21.0	21.0	27.0	32.0	32.0	32.0	32.0
19	---	16.0	14.0	15.0	13.0	21.0	29.0	27.0	33.0	32.0	35.0	32.0
20	21.0	12.0	15.0	17.0	13.0	20.0	27.0	27.0	33.0	33.0	35.0	30.0
21	21.0	15.0	15.0	13.0	19.0	24.0	22.0	28.0	31.0	28.0	32.0	22.0
22	20.0	9.0	10.0	12.0	9.0	22.0	25.0	28.0	30.0	30.0	31.0	20.0
23	19.0	15.0	12.0	13.0	16.0	24.0	25.0	29.0	27.0	33.0	32.0	20.0
24	21.0	18.0	17.0	14.0	19.0	21.0	23.0	28.0	31.0	34.0	33.0	26.0
25	22.0	---	17.0	9.0	19.0	19.0	22.0	30.0	35.0	32.0	---	28.0
26	22.0	10.0	18.0	12.0	11.0	20.0	17.0	31.0	31.0	30.0	32.0	29.0
27	20.0	14.0	15.0	7.0	16.0	24.0	17.0	---	34.0	28.0	34.0	29.0
28	21.0	12.0	19.0	3.0	21.0	16.0	20.0	30.0	35.0	31.0	28.0	28.0
29	22.0	12.0	20.0	6.0	20.0	15.0	24.0	24.0	34.0	33.0	30.0	25.0
30	21.0	13.0	12.0	7.0	---	---	28.0	24.0	33.0	32.0	29.0	24.0
31	20.0	---	7.5	7.0	---	18.0	---	26.0	---	32.0	28.0	---
MONTH	22.0	16.0	13.0	10.0	12.0	19.0	23.5	25.0	31.0	30.5	32.0	29.0

07332800 CANEY BOGGY CREEK NEAR ASHLAND, OKLA.

LOCATION.--Lat 34°45'13", long 96°08'52", in SW1/4SE1/4SE1/4 sec. 4, T.3 N., R.11 E., Coal County, at end of county road, approximately 2.0 mi (3.2 km) west of State Highway 31, 2.0 mi (3.2 km) northeast of Parker, 5.0 mi (8.0 km) west of Ashland.

DRAINAGE AREA.--49 sq mi (126.9 km²).

PERIOD OF RECORD.--Chemical analyses: February 1972 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED BORON (B) (UG/L)
FEB.								
25...	16	80	0	27	12	.60	--	60
MAR.								
05...	19	96	0	28	14	.50	.02	50
15...	6.2	30	0	14	6.0	4.7	.18	60
25...	15	80	0	22	14	.70	.10	70
APR.								
05...	18	104	0	25	15	.60	.04	90
15...	21	134	0	27	16	.90	.05	80
25...	9.6	64	0	17	7.5	1.3	.15	90
MAY								
05...	11	70	0	17	6.3	1.4	--	92
15...	9.2	52	0	13	5.0	1.2	--	99
25...	15	122	0	18	8.8	1.0	--	86
JUNE								
05...	17	148	0	15	10	.50	--	70
15...	21	184	0	16	12	.60	--	60
25...	18	164	0	11	10	.60	--	80
JULY								
05...	12	102	0	15	9.7	2.2	--	56
15...	12	122	0	10	8.3	1.6	--	95
25...	17	160	0	12	9.5	1.4	--	120
SEP.								
20...	13	116	0	17	8.0	3.0	--	120
25...	6.6	44	0	13	5.0	2.1	--	110
30...	8.1	60	0	13	6.0	2.3	--	71

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
FEB.							
25...	140	.19	74	8	.8	230	6.8
MAR.							
05...	158	.21	84	5	.9	258	7.4
15...	670	.91	36	11	.4	105	6.3
25...	127	.17	74	8	.8	214	7.5
APR.							
05...	160	.22	90	5	.8	263	7.7
15...	184	.25	110	0	.9	308	6.8
25...	980	1.33	58	5	.5	161	7.3
MAY							
05...	117	.16	60	3	.6	161	8.0
15...	87	.12	44	1	.6	125	7.1
25...	152	.21	98	0	.7	243	7.6
JUNE							
05...	169	.23	110	0	.7	280	7.6
15...	207	.28	130	0	.8	341	7.6
25...	183	.25	120	0	.7	300	7.8
JULY							
05...	140	.19	84	0	.6	224	7.4
15...	138	.19	94	0	.5	234	7.8
25...	183	.25	120	0	.7	299	7.9
SEP.							
20...	137	.19	100	5	.6	245	7.6
25...	59	.08	42	6	.4	103	6.0
30...	74	.10	54	5	.5	129	6.0

07332800 CANEY BOGGY CREEK NEAR ASHLAND, OKLA.--Continued

FIELD ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION
FEB.					
23...	210	7.6	10.0	--	--
MAR.					
09...	275	8.0	11.0	9.3	88
23...	195	7.8	17.0	8.4	92
APR.					
05...	290	8.2	16.5	8.2	88
25...	160	7.9	13.0	8.6	83
MAY					
09...	190	8.2	18.0	7.8	87
30...	260	7.9	21.0	7.8	92
JUNE					
14...	380	8.0	28.0	7.2	96
27...	300	7.5	32.0	5.0	70
JULY					
11...	220	8.2	27.0	6.8	87
28...	290	8.3	29.0	6.4	85
SEP.					
26...	90	6.6	27.0	7.6	96
29...	110	6.5	25.0	7.2	91

07335000 CLEAR BOGGY CREEK NEAR CANEY, OKLA.

LOCATION.--Lat 34°15'09", long 96°12'19", in NW1/4SE1/4 sec. 36, T.3 S., R.10 E., Atoka County, at gaging station at bridge on old U.S. Highways 69 and 75, 0.5 mi (0.8 km) downstream from Caney Creek, 1.5 mi (2.4 km) north of Caney, and at mile 24.1 (38.8 km).

DRAINAGE AREA.--720 sq mi (1,864.8 km²).

PERIOD OF RECORD.--Chemical analyses: Water years 1952-1955 (partial-record station), October 1955 to September 1959, water years 1960-1961 (partial record station), October 1961 to current year.
Water temperatures: October 1955 to September 1959.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-CHARGE (CFS)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)
OCT.									
06...	403	10	112	0	16	12	.20	.90	--
NOV.									
15...	58	32	302	2	30	50	.00	.00	--
DEC.									
06...	2310	--	--	--	--	--	--	--	--
14...	2010	7.8	128	0	16	11	.05	.20	--
JAN.									
06...	242	24	224	0	30	35	.05	.20	--
25...	128	--	--	--	--	--	--	--	--
FEB.									
09...	113	--	--	--	--	--	--	--	--
23...	104	40	302	0	38	62	.02	.10	.02
MAR.									
03...	88	--	--	--	--	--	--	--	--
13...	74	44	318	0	34	70	.00	.00	.02
25...	63	--	--	--	--	--	--	--	--
APR.									
03...	51	--	--	--	--	--	--	--	--
13...	43	56	326	0	31	94	.09	.40	.02
MAY									
04...	224	--	--	--	--	--	--	--	--
16...	371	17	156	0	24	24	.07	.30	--
24...	116	--	--	--	--	--	--	--	--
JUNE									
01...	113	--	--	--	--	--	--	--	--
27...	22	46	286	0	25	80	.02	.10	--
JULY									
12...	19	--	--	--	--	--	--	--	--
21...	17	29	166	0	18	44	.25	1.1	--
AUG.									
08...	6.0	--	--	--	--	--	--	--	--
23...	13	80	264	0	18	150	.09	.40	--
SEP.									
05...	68	--	--	--	--	--	--	--	--
18...	6.6	58	264	0	18	87	.02	.10	--

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.								
06...	145	.20	158	100	8	.4	249	7.8
NOV.								
15...	376	.51	58.9	280	29	.8	645	8.4
DEC.								
06...	--	--	--	--	--	--	235	--
14...	153	.21	830	120	15	.3	267	7.8
JAN.								
06...	289	.39	189	210	26	.7	492	8.3
25...	--	--	--	--	--	--	637	--
FEB.								
09...	--	--	--	--	--	--	630	--
23...	410	.56	115	290	42	1.0	700	8.3
MAR.								
03...	--	--	--	--	--	--	723	--
13...	429	.58	85.7	300	39	1.1	742	8.3
25...	--	--	--	--	--	--	736	--
APR.								
03...	--	--	--	--	--	--	772	--
13...	492	.67	57.1	310	43	1.4	819	8.3
MAY								
04...	--	--	--	--	--	--	396	--
16...	219	.30	219	150	22	.6	368	7.8
24...	--	--	--	--	--	--	469	--
JUNE								
01...	--	--	--	--	--	--	630	--
27...	378	.51	22.5	24	0	4.1	676	8.0
JULY								
12...	--	--	--	--	--	--	486	--
21...	237	.32	10.9	150	14	1.0	434	7.4
AUG.								
08...	--	--	--	--	--	--	886	--
23...	493	.67	17.3	270	53	2.1	902	7.9
SEP.								
05...	--	--	--	--	--	--	193	--
18...	381	.52	6.79	250	33	1.4	696	8.0

07335700 KIAMICHI RIVER NEAR BIG CEDAR, OKLA.
(Hydrologic bench-mark station)

LOCATION.--Lat 34°38'18", long 94°36'45", in SW1/4SE1/4 sec.18, T.2 N., R.26 E., LeFlore County, in Ouachita National Forest, at gaging station at bridge on State Highway 63, 0.2 mi (0.3 km) upstream from Rattlesnake Creek, 1.1 mi (1.8 km) upstream from Big Branch, 2.1 mi (3.4 km) east of Big Cedar, and at mile 157.6 (253.6 km).

DRAINAGE AREA.--40.1 sq mi (103.9 km²).

PERIOD OF RECORD.--Chemical analyses: December 1965 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)
OCT. 20...	260	8.2	1.6	.5	2.2	1.4	8	0	3.5	3.0	.1	.16
NOV. 09...	11	9.3	.8	1.4	2.2	.9	8	0	3.0	3.5	.2	.00
DEC. 21...	71	7.7	1.2	.7	1.7	.7	8	0	2.0	2.0	.0	.02
JAN. 18...	30	8.1	2.3	.6	2.2	.7	10	0	3.0	2.0	.0	--
FEB. 22...	46	7.3	1.2	.5	2.1	.7	8	0	2.0	2.0	.0	--
MAR. 14...	148	8.6	.8	.7	1.9	.8	8	0	2.6	1.6	.0	.02
APR. 11...	13	8.4	1.2	.5	2.2	.8	8	0	2.4	1.8	.2	.05
MAY 16...	9.9	8.0	1.6	.5	2.1	.8	9	1	3.1	2.0	.1	.09

DATE	DISSOLVED NITRATE (NO3) (MG/L)	PHOSPHATE (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND (MG/L)
OCT. 20...	.70	1.1	25	.03	17.5	6	0	.4	25	6.1	8	.9
NOV. 09...	.00	.00	24	.03	.71	8	1	.3	24	6.3	4	.2
DEC. 21...	.10	.03	20	.03	3.83	6	0	.3	26	6.6	2	.2
JAN. 18...	.30	.00	23	.03	2.97	6	0	.4	22	6.4	3	.2
FEB. 22...	.40	.01	20	.03	2.48	5	0	.4	21	6.9	4	2.0
MAR. 14...	.10	.04	20	.03	7.99	5	0	.4	21	7.8	6	.1
APR. 11...	.20	.04	22	.03	.77	5	0	.4	22	7.3	2	2.2
MAY 16...	.40	.08	21	.03	.56	6	0	.4	25	6.9	8	1.0

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DISSOLVED GROSS ALPHA AS U-NAT. (UG/L)	SUSPENDED GROSS ALPHA AS U-NAT. (UG/L)	DISSOLVED GROSS BETA AS CS-137 (PC/L)	SUSPENDED GROSS BETA AS CS-137 (PC/L)	DISSOLVED GROSS BETA AS SR90 /Y90 (PC/L)	SUSPENDED GROSS BETA AS SR90 /Y90 (PC/L)	DISSOLVED RA-226 (RADON METHOD) (PC/L)	DISSOLVED URANIUM (U) (UG/L)
DEC. 01...	<.4	<.4	1.2	.5	1.0	.5	.05	<.01

07335700 KIAMICHI RIVER NEAR BIG CEDAR, OKLA.--Continued

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	ALDRIN (UG/L)	CHLOR-DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI-AZINON (UG/L)	DI-ELDRIN (UG/L)
DEC. 21...	.00	.0	.00	.00	.00	.00	.00

DATE	ENDRIN (UG/L)	HEPTA-CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	MALA-THION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)
DEC. 21...	.00	.00	.00	.00	.00	.00

ANALYSES OF MINOR AND TRACE CONSTITUENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT. 25...	26	13	0	10	0	730
NOV. 17...	1	6	10	4	3	3
JAN. 18...	8	9	0	11	7	10
MAY 16...	23	6	10	1	3	10

INSTANTANEOUS SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTAN-TANEOUS DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)
OCT. 20...	1100	260	8	5.60
NOV. 20	1715	---	3	---
DEC. 15...	1400	---	7	---
21...	1100	71	4	0.80
JAN. 18...	1300	30	8	0.60
FEB. 15...	1400	---	16	2.00
22...	1600	46	16	2.00
MAR. 14...	1400	148	14	5.60
APR. 11...	1500	13	8	0.30
MAY 16...	1300	9.9	6	0.20

FIELD ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	SPECI-FIC COND-UCTANCE (MICR)-MHOS)	PH (UNITS)	TEMP-ERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	IMME-DIATE COLI-FORM (COL. PER 100 ML)	FECAL COLI-FORM (COL. PER 100 ML)
OCT. 20...	22	8.0	19.0	8.3	3000	180
NOV. 09...	23	6.9	11.0	10.1	160	10
DEC. 21...	14	6.9	8.0	10.7	420	6
JAN. 18...	16	7.0	8.0	10.7	320	4
FEB. 22...	17	6.1	10.0	10.7	260	28
MAR. 14...	18	6.7	12.0	9.9	613	62
APR. 11...	25	7.1	20.0	8.5	790	21
MAY 16...	25	7.6	15.0	9.5	5200	6

07336730 RED RIVER NEAR VALLIANT, OKLA.

LOCATION.--Lat 33°55'20", long 95°04'56", McCurtain County, 5.75 mi (9.25 km) south of Valliant, 0.1 mi (0.2 km) upstream from Garland Creek, approximately 8.8 mi (14.2 km) upstream from Highway 37 bridge.

DRAINAGE AREA.--46,730 sq mi (121,030.7 km²).

PERIOD OF RECORD.--Chemical analyses: July 1970 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	PHENOLS (UG/L)
NOV.									
03...	140	.02	.10	.07	771	7.8	18	3.1	1
FEB.									
23...	200	.18	.80	.19	1060	7.8	13	2.5	1
MAR.									
01...	280	.07	.30	.06	1360	7.8	5	1.0	0
08...	180	.09	.40	.13	1070	7.8	11	3.5	3
15...	170	.09	.40	.07	1000	8.3	18	2.5	6
22...	160	.09	.40	.06	898	7.8	13	2.5	6
22...	--	--	--	--	1060	7.1	240	62	--
29...	200	.02	.10	.06	1060	8.0	11	2.3	12
APR.									
05...	200	.05	.20	.07	1050	7.4	15	2.1	0
12...	230	.05	.20	.06	1200	7.3	15	6.8	2
19...	230	.05	.20	.09	1180	7.4	12	4.2	3
26...	20	.07	.30	.11	208	7.6	29	3.4	3
MAY									
03...	31	.02	.10	.24	322	7.0	24	2.8	2
17...	36	.18	.80	.17	307	7.3	26	1.9	2
24...	200	.02	.10	.01	1010	7.3	17	3.2	1
31...	220	.02	.10	.07	1120	7.6	16	2.4	2
JUNE									
08...	240	.07	.30	.04	1180	7.6	13	1.7	1
21...	260	.11	.50	.03	1290	7.7	12	2.1	1
28...	320	.14	.60	.01	1510	7.8	16	1.7	1
JULY									
05...	230	.18	.80	.10	1150	8.1	16	2.4	1
12...	120	.14	.60	.10	795	8.4	18	3.3	3
19...	290	.29	1.3	.07	1390	8.2	16	2.4	0
AUG.									
02...	280	.11	.50	.04	1360	8.2	14	3.4	0
09...	270	.07	.30	.04	1390	8.1	14	3.2	0
16...	330	.09	.40	.12	1610	8.1	18	2.6	1
23...	360	.07	.30	.06	1660	8.1	20	4.2	2
30...	250	.20	.90	.07	1350	7.5	14	3.8	1
SEP.									
06...	200	.27	1.2	.04	1140	7.7	20	5.0	0
13...	370	.05	.20	.08	1690	7.6	15	3.3	0
27...	95	.36	1.6	.10	581	7.8	17	2.2	0

RED RIVER BASIN

07336760 RED RIVER NEAR MILLERTON, OKLA.

LOCATION.--Lat 33°51'42", long 95°01'51", McCurtain County, at State Highway 37 bridge, 8.2 mi (13.2 km) southwest of Millerton, approximately 8.8 mi (14.2 km) downstream from Garland Creek.

DRAINAGE AREA.--46,930 sq mi (121,548.7 km²).

PERIOD OF RECORD.--Chemical analyses: July 1970 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	PHENOLS (UG/L)
OCT.									
06...	180	.11	.50	.02	951	7.2	22	2.4	4
13...	34	.07	.30	.02	931	7.3	11	2.6	0
20...	40	.01	1.8	.30	309	7.3	31	2.8	1
27...	160	.16	.70	.22	292	7.3	20	1.1	1
NOV.									
03...	110	.05	.20	.11	770	7.4	13	2.2	2
10...	210	.09	.40	.05	1090	7.7	13	.9	8
17...	240	.09	.40	.09	1200	7.9	14	.8	19
23...	84	.18	.80	.19	520	7.6	22	.2	1
DEC.									
01...	110	.27	1.2	.04	830	7.8	11	.8	10
08...	26	.14	.60	.18	265	7.8	32	2.4	2
16...	36	.18	.80	.12	261	7.5	27	3.0	--
21...	55	.09	.40	.08	244	7.7	18	1.0	8
28...	93	.16	.70	.10	534	7.7	22	2.2	3
JAN.									
05...	110	.00	.00	.01	668	7.2	16	1.6	3
12...	200	.14	.60	.02	1070	7.7	14	1.6	10
19...	240	.02	.10	.01	1220	7.7	16	3.7	36
26...	240	.07	.30	.09	1250	7.8	13	--	--
FEB.									
02...	210	--	.50	.19	1120	7.2	15	1.5	20
09...	250	--	.90	.22	1240	7.5	9	2.2	9
16...	210	--	.60	.15	1090	7.6	12	2.0	11
23...	220	--	.60	.22	1170	7.7	14	3.7	23
MAR.									
01...	300	--	.70	.03	1370	7.4	13	1.8	12
08...	180	--	.20	.03	1070	7.8	15	3.6	15
15...	180	--	.40	.07	1030	7.0	18	2.5	10
22...	--	--	--	--	1040	7.7	23	2.4	--
22...	190	--	.10	.14	1050	7.7	25	3.6	8
29...	180	--	.10	.07	960	7.8	15	2.6	2
APR.									
05...	200	.02	.10	.04	1080	--	16	2.2	2
12...	240	.02	.10	.04	1220	7.4	14	3.8	5
19...	220	.02	.10	.06	1190	7.4	22	3.6	9
26...	18	.07	.30	.16	204	7.5	36	1.8	1
MAY									
03...	30	.14	.60	.07	302	6.9	25	3.0	0
10...	28	.09	.80	.00	332	7.1	24	4.0	3
17...	36	.20	.90	.12	305	7.2	27	1.9	3
24...	230	.05	.20	.14	1120	7.0	28	7.3	1
31...	230	.02	.10	.13	1170	7.3	18	2.0	1
JUNE									
08...	280	.05	.20	.07	1340	7.2	15	2.8	4
14...	250	.07	.30	.01	1220	7.6	38	2.0	2
21...	290	.07	.30	.06	1400	7.7	13	2.1	4
28...	320	.07	.30	.03	1530	7.9	15	1.8	4
JULY									
05...	240	.14	.60	.06	1220	8.0	19	2.6	3
12...	140	.14	.60	.17	891	8.4	20	1.6	6
19...	280	.09	.40	.07	1360	8.3	21	2.8	8
27...	280	.18	.80	.01	1400	8.1	19	4.2	0
AUG.									
02...	290	.23	1.0	.12	1400	8.2	14	3.1	0
09...	260	.18	.80	.05	1400	8.3	27	3.0	1
16...	340	.11	.50	.19	1610	8.3	25	2.6	2
23...	340	.07	.30	.13	1630	8.0	18	2.6	1
30...	240	.11	.50	.07	1350	7.1	28	4.0	0
SEP.									
06...	200	.09	.40	.06	1220	7.7	30	4.8	1
13...	--	--	--	--	--	--	22	4.2	--
13...	340	.29	1.3	.09	1630	7.8	24	3.8	2
13...	--	--	--	--	--	--	19	4.9	--
20...	330	.07	.30	.07	1640	7.6	20	2.8	0
27...	110	.41	1.8	.09	660	7.7	23	2.0	1
TIME WTD. AVG.	184	.12	.54	.09	987	7.6	20	2.7	6

07338500 LITTLE RIVER BELOW LUKFATA CREEK, NEAR IDABEL, OKLA.

LOCATION.--Lat 33°56'28", long 94°45'30", in SE1/4SE1/4 sec. 14, T.7 S., R.24 E., McCurtain County, at gaging station on bridge on U.S. Highway 70 just downstream from Lukfata Creek, 5 mi (8.0 km) northeast of Idabel, and at mile 103.4 (166.4 km).

DRAINAGE AREA.--1,226 sq mi (3,175.3 km^2).

PERIOD OF RECORD.--Chemical analyses: October 1947 to September 1954, November 1960 to September 1963, October 1968 to current year.
Water temperatures: October 1947 to September 1954.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
OCT.										
13...	50	19	35	0	8.1	31	--	--	.50	.06
NOV.										
03...	270	4.5	18	0	4.6	6.4	--	--	.80	.02
DEC.										
16...	5240	2.8	18	0	4.0	4.2	--	--	1.2	.05
JAN.										
12...	5420	1.9	13	0	5.1	3.0	--	--	.30	--
FEB.										
08...	940	3.9	20	0	6.0	6.2	--	--	.50	.02
MAR.										
22...	421	8.4	24	0	8.9	10	--	--	.30	.06
APR.										
05...	307	6.0	22	0	7.7	9.5	--	--	.40	.06
MAY										
03...	2920	6.2	18	0	4.1	6.7	--	--	.40	.05
JUNE										
14...	50	19	36	0	8.0	28	.1	--	.30	.14
JULY										
19...	22	28	44	0	7.2	42	--	--	.50	.17
AUG.										
09...	18	37	44	0	6.9	62	--	.07	.30	--
SEP.										
13...	12	57	48	0	8.3	94	--	.07	.30	--

DATE	PHOSPHATE (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)
OCT.									
13...	.18	107	.15	14.4	38	9	1.3	172	6.8
NOV.									
03...	.07	41	.06	29.9	20	5	.4	58	6.8
DEC.									
16...	.16	38	.05	538	20	5	.3	48	6.9
JAN.									
12...	.06	35	.05	512	16	5	.2	40	6.8
FEB.									
08...	.06	50	.07	127	22	6	.4	60	7.1
MAR.									
22...	.20	55	.07	62.5	24	4	.7	81	7.2
APR.									
05...	.17	55	.07	45.6	26	8	.5	84	7.1
MAY									
03...	.14	46	.06	363	16	1	.7	57	7.1
JUNE									
14...	.43	98	.13	13.2	33	3	1.4	166	7.2
JULY									
19...	.51	128	.17	7.60	40	4	1.9	226	7.3
AUG.									
09...	.22	168	.23	8.16	48	12	2.3	293	7.6
SEP.									
13...	.17	221	.30	7.16	52	13	3.4	402	7.5

07338500 LITTLE RIVER BELOW LUKFATA CREEK, NEAR IDABEL, OKLA.--Continued

FIELD ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER CENT SATUR-ATION
OCT.					
13...	180	7.9	19.0	7.2	81
NOV.					
03...	50	7.9	18.5	7.1	78
DEC.					
27...	--	--	11.0	9.8	93
JAN.					
12...	85	7.7	8.0	10.6	95
FEB.					
08...	75	8.4	6.0	10.0	83
MAR.					
22...	90	7.8	16.0	9.0	65
APR.					
05...	80	7.8	17.5	9.5	103
MAY					
03...	140	8.3	16.0	9.2	97
JUNE					
14...	185	8.0	25.0	7.8	98
JULY					
19...	220	8.3	31.0	5.8	78
AUG.					
09...	300	8.1	31.0	6.0	81
SEP.					
13...	410	7.6	28.0	6.4	83

ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD WATER-QUALITY STATIONS

ARKANSAS RIVER BASIN

07232610 BEAVER RIVER NEAR OPTIMA, OKLA. (LAT 36°43'57", LONG 101°23'46")

DATE	DIS-CHARGE (CFS)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)	DIS-SOLVED AMMONIA ORGANIC NITRO-GEN (N) (MG/L)
JAN. 26...	--	73	290	0	120	75	.63	2.8	.03	.1	1.1
AUG. 14...	E.50	200	228	0	120	230	.05	.20	.00	.0	28
SEP. 20...	--	100	286	0	100	120	.02	.10	.00	.0	3.5

DATE	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)
JAN. 26...	1.5	554	.75	--	300	62	1.8	852	8.2	13	2.0
AUG. 14...	5.3	800	1.09	1.08	230	43	5.8	1300	7.9	390	136
SEP. 20...	1.7	552	.75	--	280	45	2.8	994	7.9	42	11

07232630 BEAVER RIVER NEAR HOOKER, OKLA. (LAT 36°41'22", LONG 101°12'19")

DATE	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)	DIS-SOLVED AMMONIA ORGANIC NITRO-GEN (N) (MG/L)
JAN. 26...	55	276	2	130	42	.54	2.4	.03	.1	.24
SEP. 20...	42	200	--	140	18	.05	.20	.00	.0	2.4

DATE	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)
JAN. 26...	.62	545	.74	320	90	1.3	848	8.4	5	.9
SEP. 20...	.59	416	.57	240	76	1.2	634	8.1	15	3.4

07324150 WASHITA RIVER NEAR MOOREWOOD, OKLA. (LAT 35°39'50", LONG 99°20'28")

DATE	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)
DEC. 14...	62	356	0	820	35	.14	.60

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
DEC. 14...	1550	2.11	1000	710	1860	7.7	9.0

INDEX

Page

Arkansas River, at Arkansas City, Kans 20
  at Ralston 40
  at Sand Springs Bridge, near Tulsa 68

Beaver River, at Beaver 112
  near Guymon 111
  near Hooker 202
  near Optima 202
Bird Creek, near Catoosa 84
  near Sperry 80
Blue Beaver Creek near Cache 172

Canadian River, at Bridgeport 106
  at Calvin 98
  near Whitefield 132
Caney Boggy Creek near Ashland 193
Caney River near Ramona 76
Canton Lake, near Canton 114
Cimarron River, at Perkins 60
  near Buffalo 48
  near Waynoka 54
Clear Boggy Creek near Caney 195
Collection and examination of data 12
Cooperation 2

Deep Fork, near Arcadia 124
  near Beggs 128
Definition of terms and abbreviations 2

East Cache Creek near Walters 168
Elk Creek near Hobart 158
Elm Fork of North Fork Red River, near Carl 146
  near Mangum 152

Foss Reservoir near Foss 179

Illinois River, near Gore 96
  near Watts 94
Introduction 1

Keystone Lake, near Cleveland 46
  near Sand Springs 66

Page

Kiamichi River near Big Cedar 196

Lake Thunderbird near Norman 101
Little River, below Lukfata Creek, near Idabel 200
  near Sasakwa 102

Neosho River, below Fort Gibson Lake, near
    Fort Gibson 93
  near Commerce 90
Newt Graham Lock and Dam near Inola 86
North Canadian River, near Harrah 116
  near Wetumka 120
North Fork Red River near Carter 140
  near Headrick 162

Pryor Creek, below Sulfur Creek, near Pryor 92

Red River, near Millerton 199
  near Valliant 198
Robert S. Kerr Lock and Dam near Sallisaw 138

Salt Fork Arkansas River, at Tonkawa 34
  near Jet 28
Sediment 15
Selected References 17
Solutes 14
Special networks and programs 10
Station numbers 11

Temperature 15

Verdigris River, near Inola 84
  near Oologah 74

Washita River, at Carnegie 184
  near Cheyenne 173
  near Durwood 188
  near Foss 180
  near Hammon 174
  near Moorewood 202
Water-supply papers 16

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